



Mutah University
Deanship of the Graduate Studies

**The Effect of Fishbone Diagram Technique on
Developing the Writing Skill of Tenth Grade
Female Students at Al-Karak Schools**

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Dedication

This work is dedicated to my parents, without their patience, understanding, support and most of all love, the completion of this work would not have been possible. To my sisters and brothers for all the years of love, guidance and support. To all my friends. To everyone who works hard to achieve his /her dreams.

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Abstract in English
The Effect of Fishbone Diagram Technique on Developing the Writing Skills of Tenth Grade Female Students at Al-Karak Schools

Noor Oqlah Al- Dmour

Mu'tah University, 2011

This study aimed at investigating the effect of using fishbone diagram technique on developing the writing skills of tenth grade female students at Al-Karak schools. It examined the effect of using fishbone diagram technique on tenth grade students' linguistic levels in English Language (high, intermediate, low) through answering the following questions:

- 1- Is there an effect of using Fishbone diagram technique on writing skills achievement of tenth grade students in Al Karak schools?
- 2- Is there an effect of using Fishbone diagram technique on the development of the EFL female tenth grade students writing skills due to the students' levels in the writing skills?

The sample of the study consisted of (50) female tenth grade students from Al Qutraneh Secondary School for Girls whom they were assigned purposefully into two groups; an experimental group of (25) students and a control group of (25) students.

To achieve the purpose of the study, a validated and reliable writing skill test was designed as pre and post test. A t-test was conducted to test the equivalence of the two groups and one – way ANOVA analysis was used to test the significance of the differences between the three levels (high, intermediate and low); Also Scheffe for multiple comparisons was used.

The findings of the study were as follow:

- 1- There was a statistically significant effect ($\alpha \leq 0.05$) of using fishbone diagram technique on writing skill achievement of tenth grade students in Al karak schools.
- 2-There was a statistically significant effect ($\alpha \leq 0.05$) of using fishbone diagram technique on tenth grade students' linguistic levels' (high, intermediate and low) in writing skills in favor of the high level achievers.

Based on the findings of the study, the researcher suggested that further studies under different conditions were recommended on other language skills like reading, grammar and speaking.

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Chapter One

Theoretical Background

1.1 Background of the study

English is a widely spoken language. It is currently the language most often taught as an international language. The importance of teaching English language comes from the importance of English language itself; it is considered as the first language in many countries as well as a second language in many other countries, also it is the language of new advanced sciences and new technology (Crystal, 2003)

Learning any foreign language involves far more than simply learning the forms of the language, its significant sounds, its words and its rules, full effective communication in a second language has presupposed not only the language knowledge of what is written and said in the language but how things are written and said. So in many parts of the world writing knowledge of a foreign language is often important to academic students, professional success and personal development (Kilpatrick, 1984).

Mastering the skill of writing is an essential need for any learner whose final goal is to use English, since writing logically complement, the other basic language skills, namely reading and speaking. Richard and (Roger, 2009) thought that students usually write what they have heard, said and read as a step toward true mastery of their writing and hence their language.

Pedagogues and researchers ignored writing as a major skill for a period of time. Most of their focus was placed on oral skill (listening and speaking). Most of the teachers followed the conventional methods of teaching writing where they focused on the final product rather than the writing process. (Shakir, 1991) criticized the focus of conventional methods on correct usage, grammar, spelling and punctuation.

Teaching writing no longer means simply having students do grammar exercises in writing. Instead, we are after writing about what students are interested in, and what they really want to communicate to the reader, and how they reach the final written product. (Hariston, 1991) said that good writers say something significant that is their writing informs, entertains, persuades or stimulates the reader to action or further thought. It pleases readers by telling them something of interest or value that they didn't know before. Thus, with this view in mind, the traditional methods are ineffective. As a result of that writing teaching methods need to be revised and adjusted. Since traditional methods failed to teach students how to write because they concentrate only on the grammatical mistakes neglecting the writing process that lead to the development of ideas and language skills. Because of the importance of writing skills, the development and the use of the instructional methods that facilitate and

improve students' writing and hence their language, finding new methods of teaching writing become a priority.

Writing as a language skill has been dealt with in the various schools of linguistics and methods of teaching from different perspectives. In spite of the modern and new trends in language learning which view language as an integrative entity (Gebhard, 1996). Many teachers in Jordan viewed writing as a separate skill since they teach it separately without connecting it with other language skills such as reading, listening, and speaking. Therefore, it is widely accepted by linguists, methodologists and teachers that there is no one method which is effective for all students in the same classroom (Gebhard, 1996). Thus, the researcher has concluded that in order to develop students' writing and therefore their language, it should be beneficial to follow fishbone diagram technique.

Fishbone diagram is considered as one of the graphic organizers which stand as a visual illustration that clearly show the relation between a topic and the various factors related to it. Fishbone diagram is also known as Ishikawa diagram, and it is also known as a simple and highly effective solving problem tool, and also known as a cause and effect diagram (Tripathi, 2008).

(Proctor, 2010) said that fishbone diagram encourages one to look at every aspect of problem or a topic of interest and to highlight the various relationships along with the relative importance of its various parts. It helps to see the problem from many angles fully understand the real problems and see possible solutions. It works on several levels, from using tools singly to get lots of good answers.

The shape of the diagram looks like the Skelton of a fish. The bones of the fish represent the factors that have been combined or synthesized to form categories. The categories, in turn, come together to form the topic that is depicted in the head of the fish. This way of teaching is helpful in clarifying and identifying the relation between a topic and all of the possible factors that relate to it. It can be used to represent the amount of influence of each cause.

One of the objectives of teaching English language in Jordan is that students should express themselves through writing. To achieve this objective the Ministry of Education has changed many methods of the teaching. Teachers of English language are required to join training courses where they are trained to express themselves through writing and they are taught how to teach writing in schools. Therefore, this study suggests a new way of teaching writing to fulfill the objectives of the Ministry of Education also focuses on the effect of using fishbone diagram on the achievement of tenth grade students on writing skill in Al-Karak schools.

1.2 Statement of the problem

Since writing serves a social function, as it is a means of communication between readers and writers. It demands the skillful use of vocabulary to tell the reader what they want to know. This can be achieved by writing a clear, unified, economical, well-developed and grammatical text.

For a long time, teaching has been viewed as a complex process. It is almost faced with some pedagogical difficulties that hinder attaining the prescribed teaching objectives. Teaching English is very often accompanied with some obstacles (Jordan, 1997). Most students in Jordan, for example who learn English as a foreign language find difficulty in writing in English, because there are differences between English and Arabic structures. Each language has its own structural systems, ways and means of creating texts.

As for teaching writing in Jordan, teachers themselves complain about their students' poor writings, they complain that their students are weak in composition, and that their writings do not sound like English, it seems that they were translating Arabic into English (Aljeradaat, 2008). So, it is familiar to find some difficulties that face EFL teachers in Jordan. For example teachers are unaware of the appropriate methods of teaching writing. Most of the teachers claim that teaching writing is mostly boring in the absence of appropriate teaching methods.

Students are unwilling to write in English, but if they have to, they face number of writing difficulties such as finding great difficulties in generating ideas, writing an attractive introduction and in developing a thesis statement. Parents complain that their children are unable to write a meaningful paragraph. Also their children are unaware of writing pragmatics and techniques.

(Bastur & Lewis, 2002) said that the notion of success in writing is associated with self expression, flow of ideas, outsider expectations, growing confidence and enjoyment of L2 academic writing, and L2 students are known to have problems coping with this. Therefore, teachers are obliged to use new trends and methods in teaching writing. (Al-Eidi, 2010) indicated that teachers have to vary and develop new techniques in the process of teaching inside the classroom.

The present study investigates the effect of using Fishbone diagram technique on developing the writing skills of tenth grade students in Al - Karak schools as one of the new suggested methods of teaching writing skill for EFL learners. It comes as a response to recent tendencies stated by the Ministry of Education in Jordan for highlighting the effect and values of using new effective techniques in the teaching/learning process (Ministry of Education, 2008).

1.3 Purpose and questions of the study

The purpose of the study is to investigate the effect of using Fishbone diagram on the achievement of the tenth grade students in Al-karak schools. The purpose of the study is achieved through answering the following questions :

- 1- Is there an effect of using Fishbone diagram technique on writing skills achievement of tenth grade students in Al Karak schools ?
- 2- Is there an effect of using Fishbone diagram technique on the development of the EFL female tenth grade students writing skills due to the students' levels in the writing skills?

1.4 Significance of the study

This study is significant because of the following reasons:

First, the current study tends to be one of the first studies in Jordan that investigates the effect of using Fishbone diagram technique on writing skills achievement to the best of researcher's knowledge .

Second, it introduces a new technique for teaching writing, especially for teachers who look for more effective teaching methods and techniques. This study may help educators and teachers on how to use these strategies in teaching writing effectively.

Third, this study is significant, because it attempts to help tenth grade female students to remedy their weakness in writing skills. Being a teacher for seven years at one of Al- Karak schools, the researcher hopes that she can help the students in gaining a new way of writing which could help them to write easily and effectively.

Fourth, the findings of this study can be beneficial for educators and scholars in the field of teaching and learning English as a foreign language. The results of the study are source research areas on creative techniques such as fishbone diagram, in teaching English language to Jordanian learners.

1.5 Limitations of the study

This study is limited to the following:

Tenth grade students in Al Qutraneh secondary school for girls during the first semester 2010/2011. The results of the present study might be generalized to contexts with similar research purposes (i.e. writing skills), procedures (i.e. the fishbone diagram) and instrument. Also, the findings could be generalized only to other similar populations where students come from public schools in remote settings.

1.6 Operational definition of terms

The following terms were defined in the same way that they were used in the current study:

Fishbone diagram: An analysis tool that provides a way to look at effects and causes that contributes to those effects –in a process also called a cause- and –effect and also known as Ishikawa diagram. It was firstly created in 1943 as a thinking tool by Kaoru Ishikawa an engineering professor at the University of Tokyo (Bonacorsi, 2008).

In this study: it is a chart designed by the researcher to help students to explore aspects or effects of a complex topic.

Writing skills :is the expression of sounds on graphic symbols(Guralnik, 1993). In this study; it is what students had produced in their composition writing (semantic, syntax, spelling, and communicating ideas)

Achievement: Scores that the learners, participated in the study, achieved on the post test after learning through fishbone diagram technique.

The conventional method: The method that is used in the classroom where the teacher follows the suggested procedure of the Teachers'Guide in the teaching/learning process.

Tenth grade female student: The highest class at the Basic stage. The students have theoretically spent ten years learning English as a foreign language. Their ages range between 15-16 years.

Chapter Two

Review of literature

This section presents, briefly, a review of literature related to using fishbone diagram in teaching English as a foreign language. It will cover two areas of the study: theoretical framework and review of related literature.

2.1 Theoretical framework

Writing is not an easy skill; it is a complex process that consists of different stages similarly, teaching writing as a foreign language is not a simple or effortless work. It is a cliché to say that teaching writing skills in English is not an easy job (Ozarsk, 2008, p.36).

Writing needs certain mental effort, paying attention to every single word and meaning. In general, the writer usually takes care of choosing the suitable words and of the ways by which s/he combines and arranges these words to come up with a piece of writing that expresses the idea appropriately. Before starting any writing activity, a number of questions are competing in the writers' mind. Questioning requires listing all the inquiries a writer raised about a topic, and focusing on answering the ones that are most intriguing (Carino, 1991). Writing is mostly seen as a communicative means, Hogue (1996) for example pointed out that "writing involves different mental activitiesthinking, planning, checking, and revising" (Hogue, 1996, p. 6).

The process of writing requires students to be able to synthesize ideas in order to present a logical text that conveys clear messages or express opinions of what students discuss or deal with. As a result of this, students of EFL usually face troubles in dealing with this skill. (Koutsiavida, 2004) suggested that there is no doubt that writing is the most difficult for L2 learners to master. The difficulty lies not only in generating and organizing ideas, but also in translating these ideas into reasonable text.

(Hedge, 2000) said that one of the hardest tasks in writing is getting started. Teachers should encourage their students to work in pairs to arrive at an understanding of the task by questioning and clarifying the meaning of key expression and selecting the information needed to fulfill the task. In the early stages of writing students think out a topic, discover a purpose, and decide on a perspective such activities show writing can be stimulated by students working interactively. Hedge added that interaction between students has the value of providing student writers with an audience on whom to test out the selection of the content.

There are many methods of teaching writing. One of these methods is using graphic organizers. A graphic organizer can be defined as a visual model that provides tools, concepts, and language for students and teachers. This visual model is intended to help students organize, understand and

apply information in order to attain a variety of goals and objectives (Ausubel, 1960). The use of graphic organizers has been supported through research and has been found to be highly effective in improving learning experiences for all kinds of students. It is believed that the infusion of graphic organizers into daily teaching activities helps both the teacher and students as they prepare to learn new information. Graphic organizers facilitate students' prior knowledge to help create more writing statements. Moreover, it is believed that by incorporating graphic organizers into lessons, students can achieve the objectives and goals embedded within teachers' lessons and instructions (Gil-Garcia and Villegas, 2003).

A graphic organizer is also known as a visual communication tool that uses visual symbols to express ideas and concepts to convey meaning. A graphic organizer often depicts the relationships between facts, terms, and idea within a learning task. It is often referred to as a "map" because it can help teachers and students "map out" their ideas in a visual manner. There are many similar names for graphic organizers including: knowledge, maps, story maps, cognitive organizers, advance organizers or concept diagrams (Parks and Black, 1990)

(Cleveland, 2005) said that graphic organizers are particularly useful for prewriting and planning. Organizers can help the writer to brainstorm new ideas and sort out the key points s/he wants to make. Organizers are tools to focus one's writing and writers can even use them to remember the steps of the writing process. Cleveland added that graphic organizers are ways to encourage students to think about information in new ways with writing. It is easy for students to copy from one place to another with graphic organizer they remove the words and focus on the connections. Second, they are great tool for activities that ask students to review concepts and demonstrate their understanding. Third, a huge amount of information can be shared on a single picture to provide the "big view" of a topic. Fourth, it is easy to edit, revise, and quickly add to a visual map. Fifth, graphic organizers can be used as a nice planning tool from information identification to product development. Finally, they are great for visual thinkers or those that need to practice their visual thinking.

Concept mapping in general is an active learning process that involves students in meaningful learning because it engages complex cognitive structures with the brain. Concept mapping enables students to diagram their perception of key ideas and demonstrates their perception of relationships among them (Novak and Gowin, 1984; Novak, 1998).

People are generally curious; they want to know why something happen, is happening, or could happen. People are also generally interested in the results of some events or actions. If the available topic involves investigating, attributed and associated with a single, complex topic, and

obtaining more details on each of these ideas, the best thing then is to use fishbone diagram as a graphic organizer (Wedgwood, 2006).

The idea of fishbone mapping in particular is step-by-step strategy for developing innovative and highly unusual product. This type of strategy is often known as the cause-effect diagram, which is a tool used for identifying and presenting the possible causes of a particular problem in visual format (Rolheiser, 2001).

The process of creating Fishbone diagram helps the students focus on the topic, requiring the students to review what they already know in order to organize that knowledge, and helps the students to monitor their growing comprehension of the topic. It also points out the areas where the students must investigate more. Fishbone diagram can be used to prepare for a writing assignment; the students must concentrate on the main topic, list the big ideas concerning the topics and think of the attributes, qualities, functions and effects associated with each of these ideas (Wedgwood, 2006).

The first Fishbone diagram is a common name for Ishikawa diagram, simply and highly effective problem solving tool devised by a highly respected Japanese quality expert. It was firstly created in 1943 as a thinking tool by Kaoru Ishikawa an engineering professor at the University of Tokyo. Also it is known as a cause and effect diagram. It provides a visual way of organizing disparate data as to come up with a solution to a problem, or otherwise achieve a desired outcome. The reason behind this diagram is breaking down the intertwined factors which either build as the problem or could possibly build up as the solution (Tripathi, 2008).

In order to model Fishbone diagram to students, teachers should instruct them how to recognize both a cause and effect. Simply stated, a cause is something that makes something else happen out of two events, it is the event that happens first to determine the cause, students should ask the question, "why did it happen?". An effect is what happens as a result of the cause of two related events, the effect is the one that happens secondly or at the last. To determine the effect, students should ask the question "what happened?" (Nielsen, 2009).

Whatever name researchers used we should remember that the value of fishbone diagram is to assist teams in categorizing the many potential causes of problems or issues in an orderly way and in identifying root cause. In typical fishbone diagram, the head of the fish represents the outcomes or summative effect, while the ribs of the fish are arranged into causes, the horizontal branches under each rib cause can be used to list specific example within the category. This method requires conducting a workshop or brainstorming session and collecting all the information related to the problem. The brainstorming session begins with a fishbone diagram on a white board. The fishbone starts with the body of the fish,

aligned with the causes of the problem and ends at the head with the problem statement (Nielsen, 2009).

To use cause and effect in writing classes, teachers should follow the following procedures:

1. Determine whether the topic is mainly informing or persuading.
2. Use listing to brainstorm cause-and-effect ideas. This is an effective form for prewriting.
3. Decide whether to concentrate on causes, effects, or a combination of causes and effect.
4. Do not conclude that something is an effect merely because it follows something is.
5. Lend emphasis to your main concerns (causes, effects or a combination).
6. Causes and effects can be primary main or secondary (contributing), immediate or remote.
7. The order of causes and effects may be based on time, space, emphasis, or a combination. (Brandon, 2003).

(Rolheniser, 2001) believed a fishbone strategy is useful for helping groups brainstorm and think of possible questions. It is useful for inquiry types of question development. He added that fishbone is an easy –to-use graphic organizer strategy that helps the learners organizes information they find as they read. The fishbone diagram specifically helps the learner identify and organize relationships between causes and effects. This process helps the learners organize their thinking while reading when completed, the learners will have a visual graphic that will show them at a glance the key parts of their reading assignment and their relationships.

2.2Review of related literature

(Osman, 1998) investigated the effect of the use of concept mapping tactics on writing summaries of technical materials. The subjects of the experimental group created or used maps to organize information to be summarized. The control group used no specific techniques; the results showed that map-using groups produced more transformations of ideas in their summaries than the control group.

(Sturm, 2002) in his thesis “The effects of hand-drawn and computer-generated concept mapping on the expositor writing of middle school students with learning disabilities”, he examined the effect of two forms of concept mapping, hand –drawn and computer-generated, on the descriptive essay writing of middle-level students with learning disabilities. Twelve eight-grade students composed descriptive essays under three conditions: no-map support, hand-map support. The essays were compared on four measures: number of words, syntactic maturity, number of T-units and holistic writing scores. Results indicated that students descriptive essays

produced in the hand- and computer-mapping conditions demonstrated significant increases above baseline writing samples on number of words, number of T-units and holistic writing scores. Results revealed that students' attitude toward writing were significantly more positive in the computer-mapping condition when compared to no-mapping and hand-mapping conditions.

(Powel, 2004) in his thesis "How do I start? Using t-chart graphic organizers to improve structure and organization in persuasive writing", he investigated how students could write a thesis statement and how to use a graphic organizer to structure and organize their historical essays. The sample of the study consisted of tenth grade world history classroom with twenty-eight students. The researcher used oral and written assessment, historical persuasive essays, behavior throughout the period, and T.chart graphic organizers. The results showed that after the pre-post assessments the structure and organization scores of the students didn't improve. Their attitudes toward writing in history class improve as, evidence by student feeling that T.chart helped them as they wrote, but their scores did not improve.

(Esmat, 2006) in his thesis "That graphic organizer is awesome: A study examining second grade writers using a graphic organizer and checklist to improve their writing ", he investigated how to teach students to organize their writing better using the step up to step writing using the graphic organizers approach, and then the students were taught to use a writing checklist to help them organize and improve their writing skill. The sample of the study consisted of four students. Varieties of writing activities to practice the tools were being taught. The results showed that the comparison of pre and post intervention data indicated that the use of the graphic organizers and writing checklist positively increased students' scores. The writing activities using the graphic organizers as writing tools, improve the students writing and their ability to focus on one topic.

(Brennan, 2006) in his thesis "Mind mapping, graphic organizers and students writing", he investigated the use of graphic organizers to improve student writing. This project employed the software program Inspiration™ as the graphic organizer and Elluminate Live! ® To provide a virtual classroom. The sample of the study consisted of five students in grades two and three participated in the project, stakeholder groups were at the centre of the study. The students were asked to complete two surveys and two writing samples; one at the beginning and another one at the conclusion of the project. The results showed that the students all achieved an improvement in writing, but it was not clear whether the improvement was attributable to the use of the graphic organizer or to the rich interactions and instruction that occurred in the virtual classroom.

(Hopkins, 2007) in his thesis “Classroom conditions to secure enjoyment and achievement: the pupils’ voice. Listening to the voice of every child matter”, he investigated the importance of pupil voice and the active engagement of pupils in shaping their own educational experience using an innovative form of group interview incorporating an Ishikawa or fishbone tool. It was chosen as mechanism to support the group interview process and the analysis of the resultant data into categories. It offered a structure to facilitate the analysis of cause and effect relationships. The data was collected from 180 pupils, from classes (3-6) (aged 7-11) in a UK Junior school in an East Midlands city during the summer term of 2007. The pupils in each interview group were from the same year group (that is, years 3,4,5 and 6). The fishbone diagram which was used in this study enables the students to shape their thinking, keep control of the pace of the interview and form a visual pattern of emerging expression while they were communicating, it also allowed students to speak responsibly, intelligently and usefully.

(Nguyen, 2007) in his thesis “Graphic organizer and checklist strategies to improve summarization skills”, he investigated the ability of the student to use a graphic organizer created using Step Up to Writing strategies and a checklist in order to help students with their article summaries. The sample of the study consisted of five students (two from the fourth grade and three from the fifth grade). The results of the study provided that the comparisons of baseline data to outcome data suggested that using a graphic organizer and a checklist improved students' ability to write an article summary. The graphic organizer was able to assist students in organizing their ideas in a logical progression, help students create a topic sentence, conclusion sentence, and indicate where details are expected in a paragraph.

(Wagner, 2008) in his thesis “Using kidspiration™ computerized graphic organizers to assist students writing organizational skills”, he investigated if the implementation of a computer graphic program, Kidspiration™, would enhance students’ writing skills. The sample of the study consisted of three fourth grade students. At the time of the intervention, students applied their computer program. The results showed that using the Kidspiration™ computer program increased student organizational skills in writing therefore giving them a better opportunity for meeting the writing requirements that are given on the NJASK standardized test.

(Tan, 2009) in his thesis “Can we use a story Map? Using a story map graphic organizers for writing effective In-class summaries”, he investigated how using a story map graphic organizer will help improve students’ structure and organization in their narrative writing. The sample of the study consisted of four students. Variety of writing activities to

practice the tool were being taught. The results showed slight growth on the target students' writing scores based on a rubric. Conclusions showed that story map graphic organizer provided students with visual display of how to write a narrative. It also provided students with guidance to sections of a narrative.

(Fregus, 2009) in his thesis “Scaffolding Instruction and using graphic organizers for writing effective In-Class summaries” ,he investigated how and to what extent do teaching students different summarizing strategies using graphic organizers and scaffolds and giving students practice with in-class writing influence students' ability to organize and write an effective summary in a timed, in-class setting. The sample of the study consisted of eleven students, of which eight were boys and three were girls. The experiment took three weeks of carefully designed lessons that included variety of graphic organizers, scaffolds, and modeling. The results showed that the comparison between the pre and the post intervention data indicated that students' ability to write in-class summaries improved significantly in this intervention. Students could write a more completed, well organized, and effective summary after the invention.

(Nuguyen, 2009) in his thesis “The effect of graphic organizers on third grade students narrative writing”, he investigated in what ways graphic organizers along with teacher guided questions affect third grade English language learners performance on narrative writing prompts. The sample of the study consisted of four students. Varsity of writing activities were used to increase students' organization in writing. The results showed that the comparison between the pre and the post intervention data indicates that one student made moderate gains, and two students showed slight improvement throughout the intervention, but did not show improvement on their post assessment. Conclusions showed that graphic organizers helped students to organize their ideas and write more organized paper. It also helped improve the use of story connectors and adjectives, student's interest in writing went down slightly, but they showed increased confidence in their writing ability.

(Roger, 2009) in his thesis “Using fishbone organizes in our school production. school's Bernard's school”, he investigated ways to improve students' capability to manage self including students' awareness of and ability to use key learning tools for their achievement level e.g. organizational and thinking tools. The sample of the study consisted of (22) students from St. Bernard's school, year level :(2, 3, 4). The researcher used the form of interviews at the beginning of the study as the students were completing their ‘fishbone’ about the strengths and weaknesses of using this tool and at the end he used a questionnaire after they had finished the topic. The results showed that at the beginning of the unit 86% of students were at the novice level. They had limited ability or knowledge on how to

use a 'fishbone' thinking tool effectively. By the end of the term 68% of the students had become practitioners or experts.

(Smadi, 2010) his thesis "The Effect of an instructional program based on fishbone mapping and six hats strategies on developing Ajloun university college EFL students' writing" ,he investigated the effect of a designed writing instructional program based on fishbone mapping and six hats strategies on students' achievement in writing. It was conducted in Jordan. The sample of the study consisted of 89 students of three sections. A quasi –experimental mode of inquiry was adopted .The results of the study showed that there were statistically differences in favor of the experimental groups which were taught according to the instructional writing program. Meanwhile, the results revealed to significant differences between the mean scores of fishbone mapping and six hats, but the performance of students in the fishbone mapping was better than the six hats. Also the findings indicated significant differences between the students' average level (low, med, high) attributed to the experimental groups in favor of the average level (med and high). In addition, the findings showed significant differences between the writing skill components attributed o the used teaching strategies in favor of the fishbone and six hats. Moreover, the results indicated significant improvement in all writing skill components in general and in favor of the content.

2.3 Summary

Through reviewing the related literature, one can see the great importance of writing skills as an effective way of communication in a foreign language. Also we can see the importance of using different kinds of graphic organizers as educational strategy in teaching writing skills in English language as in (Powel, 2004; Esmat ,2006; Brenner 2006; Nguyen, 2007; Wegner ,2008; Fregus, 2009; Nugyen, 2009; Hopkins ,2007).Other studies concentrated on concept mapping as away of teaching writing (Osman, 1998; Sturm, 2002 and Tan, 2009).

In this study, fishbone diagram is a teaching technique stretching across teaching English as a foreign language to facilitate and deepen the skill of writing.

To the researcher's knowledge, this present study is one of the first studies to be conducted in Jordan on the effect of fishbone diagram technique on the writing skills. However, the present study is, in general, similar to some reviewed international studies and a local study (Hopkins, 2007; Rogers, 2009 and Smadi, 2010) in its aim of investigating the effect of fishbone diagram technique as a thinking tool while teaching English language especially writing skills (Smadi, 2010).

It is obvious through the reviewed literature that more research is needed to investigate the effect of using fishbone diagram on writing skills in English language in order to face the difficulties that teachers or students encounter in the writing skills. Therefore, the current study tries to investigate the effect of using fishbone diagram on the enhancement of writing skills of students' achievement in English language.

Chapter Three

Design and Methodology

This chapter covers the description of the population of the study, the selection of the sample, the design, the instructional material, the instruments, as well as validity and reliability of the instrument, the procedures of the study, and the statistical analyses.

3.1 Population

The population of the current study consisted of all the female tenth grade students in public schools in Al Karak Directorate of Education during the academic year 2010/ 2011 where the population is estimated as (963) female students.

3.2 Sample of the study

The sample of the study consisted of (50) students who formed two sections of the tenth grade at Al Qutraneh Secondary School for Girls. The two sections were already divided according to the school records. The procedures used in selecting the sample of the study were as follows: They were divided equally into two groups; control and experimental group.

- 1- The sample was chosen purposefully for reasons related to the convenience of the researcher such as the sample of the study stands as average student for the researcher so it was easy to deal with them. Also the great cooperation of the headmistress was encouraging to choose this school as the sample of the study.
- 2- The selected school has only two sections of (25) students for each and was purposefully selected to be an experimental group which was taught the writing topics by using fishbone diagram technique and the other section of (25) students was selected purposefully to be the control group which was taught the same writing topics using the conventional method.

3.3 Design of the study

The study followed a quasi-experimental research design. Quantitative methods were used to test the effectiveness of fishbone diagram as a technique on the achievement of EFL learners. There were two groups in this study; experimental and control group. The study had an independent variable (the teaching technique), which consisted of two levels:

a- Fishbone diagram technique.

b- Conventional method suggested by Teachers' Guide.

However, the study included a dependent variable which is the students' achievement on writing skill.

3.4 The instructional material

The instructional material of the study consisted of three topics which were represented through three passages which were chosen from the English textbook Action Back 10 by(Haines ,2009) assigned for tenth grade (appendix I).The researcher prepared a general plan for teaching the selected texts using fishbone diagram technique (appendix II) and lessons plans for teaching the texts by the conventional method (appendix III). These plans were checked by three English teachers and three supervisors. All of them agreed that the lesson plans were acceptable and appropriate to the purpose of the study. Also, the three topics were used as a base for writing in a new way using fishbone diagram technique.

3.5 Instrument of the study

To successfully conduct this study, the following instrument was designed and used:-

A(pre-post) writing abilities achievement test, was designed by the researcher.It took the shape of text and questions.The pre-post test was designed to assess the students'levels in writing skill before and after the treatment (appendix IV).

The test of this study consisted of seven questions; the following steps were used in the construction of the test :

- 1- Because Bloom (1964) suggested the questions of the test should be suited to the levels of thinking which can be summed up as;recognition, deduction,analysis, and synthesis, while recognition and deduction are lower order, analysis and synthesis are higher-order skills of thinking of writing so, the researcher took into her knowledge, comprehension, application, analysis, synthesis and evaluation when writing the questions of the test.
- 2- The test included the following seven types of questions.
 - A-Information questions to test knowledge and ability of generalization.
 - B-Completion question to test causality relation and students' knowledge.
 - C- Multiple choice items to measure knowledge of cause and effect relationship.
 - D.True or False question recognition of certain concepts and facts in the text.
 - E.Matching question to test students recognition of cause and effect sentences.
 - F.writing composition question to test students ability to write using cause and effect.
 - G.Giving reasons question to test students ability to give reasons based on their knowledge of cause and effect.

3.6 .1 Test validity

To guarantee the content validity of the instrument, it was given to a jury of experts; three experienced university professors in teaching English as a foreign language (TEFL), three English language supervisors, three English language teachers, and one experienced professor specialized in measurement and evaluation and, two experienced university professors specialized in writing. They were asked generously to state their view regarding: clarity, suitability, relevance and appropriateness to the objectives of the research. The jury comments were studied carefully and the necessary modifications were made accordingly. Some modifications of rewriting the questions and adding some words to the questions were recommended such as in the following questions and after conducting the modifications suggested by the jury:

Question number one (first item): What caused to have difficult computer games in the future? It became: What made it difficult to have computer games in the future?

Question number one (fifth item): What are the reasons behind visiting all these buildings? It became: Why do you think people visit all these buildings?

Question number two (third item): Why do the developments of computer game graphics can cause many problems? It became: Why do you think the developments of computer game graphics can cause many problems?

Question number four (third item): The great numbers of endangered animals lead to: (construct more natural reserves/continue killing of the animals) the sentences became: (constructing more natural reserves/ killing more animals)

Question number seven (sentence number two): why do we prefer to live in modern buildings more than traditional ones? It became: Why do people prefer to live in modern buildings more than traditional ones?

The jury suggestions were studied carefully, and the necessary modifications were made accordingly.

3.6.2 Test reliability

To ensure the reliability of the test, test-retest was used. It was conducted on a sample which was randomly excluded out of the population of the study and it consisted of (30) tenth grade students at Al-Shahbeih Secondary School for Girls.

Three weeks later the same test was implemented again to the same sample. The reliability coefficient of scores of the test was calculated by using Pearson correlation coefficient which was appointed as (0.898) which is educationally appropriate to the purpose of the study.

3.7 Procedures of the study

- 1-Upon obtaining the permission from Mu'tah University and Al-Karak Directorate of Education and the headmistress of Al- Qutraneh Secondary School for Girls to conduct the study, the two sections of the tenth grade in the school were selected to be the sample of the study. One section was intentionally chosen as the experimental group which was taught using fishbone diagram technique and the other section was the control group which was taught using the conventional method.
- 2- The researcher read about fishbone diagram technique and how to use this technique inside the classroom in order to be able to use and apply it effectively. The researcher also provided the participants with many ideas as well as many questions that need to be answered before starting to teach using fishbone diagram technique.
- 3-The researcher prepared the test of the study.
- 4-The researcher ensured the validity and the reliability of the test.
- 5- The researcher ensured that the experimental group and the control in the study were equivalent by giving them the same pre test.
- 6- The researcher conducted the study of the selected sections of tenth grade female students in Al karak Directorate of Education.
- 7-The researcher divided the students in the experimental group into three groups according to their linguistic levels (below 59%is low achievement, from 60%- 79% is an intermediate achievement and above 80% is high achievement (MoE, 2005).
- 8-The researcher selected three texts to the students in order to prepare them and ask any possible questions before the classes begin.
- 9- The researcher herself taught the two groups of the study.
- 10- The researcher chose three lessons from the textbook (Action Pack 10; Fast forward to the future of games, the Shawmari Reserve, and Building for future (Haines, 2009).
- 11- The researcher taught the experimental group the given topics using fishbone diagram technique. The experiment lasted for three weeks; each lesson lasted for one week. Whereas the control group was taught the same three topics using the conventional way.
- 12- By the end of the third week, the two groups were tested again at the end of the experiment by means of a post-test which was originally used as a pre-test to check the effect of using fishbone diagram technique on writing skills achievement and their linguistic level in writing skills.
- 13-After applying the study, collecting data and analyzing these data, the researcher inferred the answer of the questions of the study.
- 14- The researcher stated three criteria in order to correct the writing topics
 1. Content and comprehensibility which has (3 points), this criterion emphasizes the realization of the writing task, using supporting details and evidence, the relevancy of the content to the writing topic.

2. Organization which has (2 points), this criterion is concerned with the extent to which the ideas are clear; the paragraphs are coherent and well-organized.
3. Grammar and spelling which has (3 points), it deals with language accuracy such as (subject-verb agreement and word usage) and the mechanics of writing such as (punctuation, Capitalization and spelling).

3.8 Statistical analyses

To answer the research questions, the following procedures were used:

- 1- A t-test of the independent groups was conducted to test the equivalence of the two groups; (the control and the experimental group).
- 2- Descriptives were used to describe properties of the variables of the study (dependent and independent variables) in terms of means and standard deviation in order to analyze the result of the post-test of the two groups.
- 3- To answer the first question of the study, test-retest reliability was used for the dependent variable.
- 4- To answer the second question of the study, One-way ANOVA was used to test the significance of the differences between the three levels (high, intermediate, low) and Scheffe for multiple comparisons was used.

Chapter Four

Findings, Discussions and Recommendations

4.1 Findings of the study

This chapter presents the findings of the study and the discussion of the results of the study according to the questions respectively.

The researcher carried out statistical analysis to examine the equivalence of both control and experimental groups and found out the means and standard deviations for their scores on the pre-test which was constructed by the researcher. Table (1) shows the pre-test results of the experimental and the control groups.

Table(1)

Pre-test results of the experimental and the control groups

Group	No. of students	Means	St.D	Std.Error Mean
Control	25	50.08	10.602	2.120
Experimental	25	50.92	18.596	3.719

Table (1) shows the means and the standard deviation of the control and experimental groups on the pre-test, where the mean score of the control group was (50.08) .While the mean score of the experimental group was (50.92). To find whether there were statistically significant differences between the achievement of the two groups on the pre-test, t- test was used. Table (2) shows the results of the t-test achievement results on the pre-test of the experimental and the control groups.

Table (2)

t-test achievement results on the pre-test Group

	F	Sig	t	df	Sig.(2-tailed)
Pre Test Equal variances	1.824	0.183	1.176	48	.245
Equal variances					

Table (2) shows that there were no statistically significant differences between the achievement of both groups on the pre test-test at ($\alpha \leq 0.05$) accordingly t was (1.176) which is greater than 0.05 (the significance level) shows that both the groups are equivalent.

Findings related to the first question: Is there an effect of fishbone digram technique on the writing skills achievement of tenth grade students in Al-Karak schools?

To answer this question, means and standard deviation scores of the control and the experimental groups' achievement on the post-test were tested. Table (3) shows the results of the post-test of the experimental and the control groups.

Table(3)
Post-test results of the experimental and the control groups

Group	No. of students	Means	St.D	Std.Error Mean
Control	25	56.36	13.756	2.751
Experimental	25	66.80	17.685	3.537

Table (3) shows that the results of the experimental group which studied the three selected topics through using fishbone diagram technique achieved higher scores on the post-test than the control group which studied the same topics using the traditional method. Mean score (66.80) of the experimental group was higher than the mean score (56.36) of the control group.

In order to clarify if there were any statistical differences between the two groups on the post-test results, a t-test was used. Table (4) shows the results of t-test achievement on the post-test of the experimental and the control groups.

Table (4)
t-test achievement results on the post-test Group

	F	Sig	t	df	Sig
pre Test Equal variances	8.432	0.006	-4.054	48	.000
Equal variances					

Table (4) shows that there were statistically significant differences at ($\alpha \leq 0.05$) accordingly t was (-4.054) which is below than $\alpha \leq 0.05$ (the significance level) in favor of the experimental group which was taught using fishbone diagram technique and achieved higher scores in the post-test than that of the control group which was taught using the traditional method. Table (5) shows the results of the experimental group in the pre-post test.

Table(5)
Results of the experimental group in the Pre-Post test

Group	No. of students	Means	St.D	Std.Error Mean
Pre-Exp	25	50.92	18.596	3.719
Post-Exp	25	66.80	17.685	3.537

Table (5) shows that the post-test which was given to the experimental group after using fishbone diagram technique gained higher scores than the pre-test which was given before the experiment. The means of the experimental group on the pre-test was (50.92) and the post-test scores was (66.80). To see whether there is a statistically significant differences

between the achievement of the two tests on the pre-test and the post-test, t-test was used. Table (6) shows t-test achievement results on the pre-post test of the experimental group.

Table (6)
t-test achievement results on the Pre-post test of the Experimental Group

	t	df	Sig
Pre-Post EXP	-5.385	24	.000

Table (6) shows that there were statistically significant differences between the achievement on the pre test-test and the post-test at ($\alpha \leq 0.05$) accordingly t was (-5.385) which is below than $\alpha \leq 0.05$ (the significe level).

Findings related to the second question: Is there an effect of using Fishbone diagram technique on the development of the EFL female tenth grade students writing skills due to the students' levels in the writing skills?

To answer this question , the researcher referred to the formal school records of students assessments to divide the experimental group students into three groups according to their linguistic levels(high, intermediate or low). The researcher classified the students as the following level : (below 59% as low achievers, from 60%-79% as intermediate acheivers and above 80% as higher achievers) this classification was based according to the criteria of the Jordanian National tests (MoE,2005).

Table(7) shows the pro-test results according to the linguistic levels of the students at the experimental group.

Table (7)
Post- test results according to the linguistic levels of students at the experimental group

Post-test				
Groups	No.of the students	Means	Std.Deviation	Std.Eerror
high	7	87.14	6.414	2.424
intermediate	9	70.78	5.848	1.949
low	9	47.00	7.228	2.409
Total	25	66.80	17.685	3.537

Table(7) shows that there were statistically significant differences in the mean scores of the experimental group on the post-test results according to their levels in writing skills(high, intermediate and low).The mean score was (87.14) for the higher acheivers .The mean score was (70.78) for intermediate level acheivers. The mean score was (47.00) for the low achievers.

It was essential to find out whether or not these differences are statistically significant. Thus, an analysis of one-way ANOVA was used. The results of the analysis of one-way ANOVA are shown in Table (8).

Table (8)
One –way ANOVA for the post test of the experimental group

	Sum of Squares	DF	Mean Square	F	Sig
Between Groups	6567.587	2	3283.794	76.985	.000
Within Groups	938.413	22	42.655		
Total	7506.000	24			

Table (8) shows that there were statistically significant differences among the students in the experimental group on the post-test results due to their levels in writing skills (high, intermediate and low) where F was(76.985). To find out to whom these differences refer, (Scheffe) for Multiple Comparisons was used. The results of the analysis are shown in Table(9)

Table(9)
(Scheffe) results for Multiple Comparisons between students' linguistics levels

		Mean		
(I)Po-EXP-L	(j)PO-EXP-L	Difference (I-J)	Std.Eerror	Sig
59 or less	60-79	-23.78*	3.079	.000
	80 and more	-40.14*	3.291	.000
60-79	59 or less	23.78*	3.079	.000
	80 and more	-16.37 *	3.291	.000
80 and more	59 or less	40.14*	3.291	.000
	60- 79	16.37*	3.291	.000

As shown in table (9), the results indicated that there were statistically significant differences between the three levels (high, intermediate and low)due to the high level of the students which means that using fishbone diagram technique was effective with all levels but it was more effective with students of high level than students of low level.

4.2 Discussion of the results related to the first question

Is there an effect of fishbone digram technique on the writing skill achievement of the tenth grade students in Al-Karak school? The results of this study revealed that there were statistically significant at ($\alpha \leq 0.05$) between students' achievement in writing skill when two different methods of instruction are employed (fishbone diagram technique and the conventional method). These results can be considered most encouraging. In connection of the use of fishbone diagram technique. The results of t-test showed that there were no statistically significant differences between the

achievement of the experimental and the control groups on the pre-test. This indicated that the two groups were equivalent.

The results of this study proved that students in the experimental group showed significant development in their writing skills achievement as measured by the post-test scores on the writing skill achievement test that was prepared by the researcher. On the contrary, no such developments in the writing skill achievements were evident for the students in the control group that was taught using the conventional method. This proved that fishbone diagram technique affected the students 'writing skills achievement positively as was shown in (Smadi, 2010) and (Rogers, 2009) results.

This result can be attributed to several factors such as the students in the experimental group found this way of writing new and different from the conventional one which encouraged them to think creatively , to use brainstorming technique .Also they liked the way they wrote in groups because they used to write individually in the conventional classes, so this way gives them a chance to ask and answer ,work and share ideas with others to reach the appropriate decision which formed their composition in its final form.

4.3 Discussion of the results related to the second question

Is there an effect of using Fishbone diagram technique on the development of the EFL female tenth grade students writing skills due to the students' levels in the writing skills?

The findings of the study showed that there were statistically significant differences between the students of the experimental group on the post-test according to their levels (high, intermediate, low) due to the high level which means that using fishbone diagram technique was effective with the high level achievers, as shown in (Smadi ,2010).

In this study, fishbone diagram technique was effective on writing skill achievement with the students of high level than the students of low level. This result can be attributed to the idea that high level achievers have more intellectual performances and experience in using high thinking skills in giving their opinions and new ideas. Also the reason might be that the students of low level may have had difficulty expressing their ideas while they are writing , as a result they show little improvement through using fishbone diagram in writing classes if it is compared to their achievement before learning through fishbone diagram technique.

4.4 Summary

Drawing from the findings of the study, it could be concluded that fishbone diagram technique was efficient on the enhancement of the writing skill achievement of tenth grade TEFL students in Al Karak

Directorate of Education. The statistically significant differences between the mean pre-test and post test writing scores suggested that students in the experimental group benefited from using fishbone diagram technique in writing skill classes.

Generally, fishbone diagram technique and its use in teaching had a great impact on students' writing skills achievement. The writing skills of tenth grade students in Al Karak Directorate of Education were developed and enhanced through using fishbone diagram technique. Also, the application of fishbone diagram technique enabled learners with different linguistic levels to develop and enhance their writing skills achievement. Students with high level showed increased and high improvement in writing skills classes.

The importance of the present study lies in introducing an effective technique for improving writing skill, which in turn, revealed strength points in trying to master writing skill via fishbone diagram technique.

4.5 Recommendations

In light of the results of the study, the researcher suggested the following recommendations for educators, teachers and researchers:

- 1-Holding seminars and workshops to train Jordanian teachers on how to implement such technique with its skills especially on writing skills classes.
- 2-Further researches are recommended to investigate the effect of using fishbone diagram technique on other language skills.
- 3-Instructors are called upon to investigate the effect of fishbone diagram at schools and universities on writing courses.

References

- Al-Eidi, R.(2010). **The effect of using creative thinking skills on the development of reading comprehension of female tenth grade students in Southern Al-Mazar Directorate of education.** Unpublished. M.A. Thesis. Mu'tah University, Jordan
- Aljeradaat, H.(2008).**Rhetorical transfer in the expository and argument writing of Jordanian EFL students.** Unpublished M.A Thesis, Mu'tah University, AL Kerak, Jordan.
- Ausubel, D. (1960). The use of advance organizers in the learning and retention of meaningful verbal materials. **Journal of Educational Psychology**, 66, 213-244
- Bastur, H. and Lewis, M.(2002). Learner perspective of success in an EAP writing course. **Assessing Writing**, 8:1, 31-46.
- Bloom,B.(1964).**Taxonomy of educational objectives:** Handbook, Cognitive Domain.NewYork.
- Bonacorsi, S. (2008). **Cause and effect diagrams(fishbone diagrams).** Retrieved on 25oct. 2010 Available on : [http://www. articlesbase.com/ management- articles/ cause-and-effect-diagrams-fishbone-diagrams-395835. html](http://www.articlesbase.com/management-articles/cause-and-effect-diagrams-fishbone-diagrams-395835.html)
- Brandon, L. (2003). **At a glance.** Houghton Mifflin Company. Boston.NewYork.
- Brennan,M.(2006).**Mind mapping ,graphic organizers and student writing.** Unpublished M.A.thesis, Royal Roads University ,Canada.
- Carino,P.(1991). **Basic writing a first course.** Harper collins Publishers Inc. USA.
- Cleveland,M(2005) **content-area graphic organizers language art.** Walch Publishing. USA.
- Crystal, D.(2003).**English as a global language.**Cambridge, university press. The United Kingdom.
- Esmat, G. (2006). **That graphic organizer is awesome:A study examining second grade writers Using a graphic organizer and checklist to improve their writing.** Unpublished M.A.thesis, University of California, Berkeley.
- Fregus,D.(2009). **Scaffolding Instruction and using graphic organizers for writing effective In-Class summareies.**Unpublished M.A.thesis. University of California, Berkeley.
- Gebhard, J. (1996).**Teaching English as a foreign or second language.** The university of Michigan press.USA.
- Gil-Garcia, A., & Villegas, J. (2003). **Engaging Minds, Enhancing comprehension and constructing knowledge through visual Representations.** (ERIC Document Reproduction Service No. ED480131) Retrieved October 12, 2007, from ERICdatabase

- Guralnik,D.(1993). **Webster's new world dictionary** (3rd.ed.). New world dictionaries/Simon and Schuster.NewYork.
- Haines, S. (2009) **Action pack 10** Dar Al-Tarbawiyoun House of Education Ltd and Pearson Education Ltd. Jordan
- Hariston, M. (1991). **Successful writing/ rhetoric for advanced composition**. Norton and Co. New York. London.
- Hedge, T.(2000).**Teaching and Learning in the Language classroom**. Oxford University Press.
- Hogue, A.(1996). **First Step in academic writing**. Addison –Welsy Longman, 10 Bank Street , White Plains, N.Y.
- Hopkins, A. (2007).**Classroom conditions to secure enjoyment and achievement: the pupils' voice. Listening to the voice of every child matter**. Unpublished M.A. thesis, University of Nebraska, U.S.A.
- Jordan, R.(1997). **English for academic purposes** .Cambridge Language teaching library. New York.
- Kilpatrick, J. (1984). **The writer's art**. Universal press syndicate company. Kansas city. New York.
- Koutsiavida, E. (2004). **Written teacher feedback: Theory and practice in the Greek content**. M.A in linguistics (TESOL).PP.120-125.
- Ministry of Education (MoE). (2008).**Toward a vision for a new educational system** .Retrieved 23 oct.Available on: <http://www.moe.gov.jo/web/forum1/pdf>.
- Ministry of Education (MoE). (2005). **National education strategy**. Directorate of Educational research and Development.
- Novak, J and Gowin, D.(1984). **Learning how to learn**. Cambridge. United Kingdom Cambridge. University Press.
- Novak, J.(1998). **Learning, creating and using knowledge : concept maps as facilitative tools in schools and corporations**. Mahwah, NJ: Lawrence Erlbaum and Associates.
- Nuguyen, S.(2009). **The effect of graphic organizers on third grade students narrative writing**. Unpublished M.A. thesis, University of California.Davis.
- Nguyen, S.(2007). **Graphic organizer and checklist strategies to improve summarization skills**. Unpublished M.A. thesis, University of California, Davis.
- Nielsen,D.(2009). **Root cause analysis in project management**. Retrieved 15 Jan 2011 Available on : [http:// www. Pmhut. com/root-cause-analysis-in project management](http://www.Pmhut.com/root-cause-analysis-in-project-management).
- Osman, J. (1998). **The use of concept mapping tactics in cognitive strategies for writing summaries of technical material**. DAL-A 58/08,p.3048.

- Ozarsk, M.(2008). Some suggestion for academic writing instruction at English teacher training colleges. **English Teaching Forum** Vo.46.No. 1.
- Parks, S. and Black, H. (1990). **Organizing thinking, graphic organizers/critical thinking**. Critical thinking co. New York.
- Powel, E .(2004) **.How do I start? using t-chart graphic organizers to improve structure and organization in persuasive writing**. Unpublished M.A. thesis. University of California, San Diego.
- Proctor,T.(2010). **Creative problem solving for managers: developing skill for decision making**. Taylor and Francis e-library. New York.
- Richards, J. and Rogers, Th.(1986). **Approaches and methods in language teaching**. Cambridge: University Press.
- Roger, P. (2009) **Using fishbone organizes in our school production. school's Bernard's school**. Retrieved 12 Dec 2010 Available on :[http:// www. swellresearch. blogepot.com/2009/02/using-fishbone-organiser-in-our-school.html](http://www.swellresearch.blogepot.com/2009/02/using-fishbone-organiser-in-our-school.html)
- Rolheiser, C.(2001).**Fishbone strategy**.(online). Retrieved on October 20,2010.Available on :[http://www.sustainableenergy.eq.edu. /html/ fishone. html\)](http://www.sustainableenergy.eq.edu.au/html/fishbone.html)
- Shakir, A.(1991).Coherence in EFL student written texts: two Perspectives. **Foreign Language Annals**, Vol, 24.No.02. Pp.399-411
- Smadi, S.(2010).**The Effect of an instructional program based on fishbone mapping and six hats strategies on developing Ajloun university college EFL students' writing**. Unpublished Ph.D.Thesis. Yarmouk University. Irbid-Jordan.
- Sturm, J. (2002). Effects of hand-drawn and computer-generated concept mapping on the expositor writing of middle school students with learning disabilities. **Disabilities Research and practice**, Vol.17, No.02, PP.124-126.
- Tan, L. (2009). **Can we use a story Map? using a story map graphic organizers for writing effective In-class summaries**. University of California.
- Tripathi. R (2008) **.Improving problem solving and focus with fishbone diagrams**. Retrieved 23oct. Available on :[http: //www.geekpreneur.com/improving-problem-solving and- focus-with-fish-bone-diagrams.](http://www.geekpreneur.com/improving-problem-solving-and-focus-with-fish-bone-diagrams)
- Wagner, E.(2008). **Using kidspiration™ computerized graphic organizers to assist students writing organizational skills**. Caldwell college.
- Wedgwood, I .(2006). **A practitioner's guide/section21. fishbone diagram**. Stephen A. Zinkraf prentice Hall. USA.

Appendix (I)
Reading Comprehension texts as cited in Action Pack 10 BY Simon
Haines(pages, 27, 39, 51)

Text One

Buildings

Burj al-Arab

It's definitely worth going, especially to see the hotel. It's the only seven-star hotel in the world. It's on a man-made Island in the Gulf, and it's 355 meters high- that's higher than the Eiffel Tower in Paris. It cost a million pounds to build, and the rooms are £2000 a night- probably because they have four staff for every guest. If you go there to eat, you can ride in one of the world's fastest lifts to one of the world's highest restaurants. I had a look round and went somewhere else to eat.

The Sydney Opera House

I went there last year. It's absolutely impossible to imagine the harbor. When I first saw it, I thought it looked like a ship. From the outside it looked huge- but inside it seemed much smaller. The hotel is a bit old fashioned-that's because it's over thirty years old, I suppose. Going to a performance there is really expensive, and it's very difficult to get tickets, but you can walk round parts of it for free.

Jordan Gates

I went with my mother. We took a taxi up the highest hill in Amman, and could see the whole city from the top of it! The whole site is massive: 220,000 square meters. It is currently being built, and when the two towers are finished they will be the tallest in Jordan.

Text Two

Fast forward to the future of games

Technology experts are predicting that computer games of the future will be a lot more difficult both for games producers and for players. In particular, they say, games will look much more realistic, and computer-controlled characters will be more believable. This means that keen computer games payers will almost certainly spend more time playing games than they do at the moment. New technology will enable companies to create more complex games. The graphics of computer games will definitely improve, but this may cause problems. Firstly, game studios will have to employ hundreds of animators to produce enough creatures to fill huge computer worlds. Secondly, designers may spend too much time on visual effects and forget about the quality of the games themselves.

One computer expert said 'when you move away from games where characters just fight each other, speaking will become much more important. We will have to make our games' characters more intelligent: in the end they will even have conversations with each other.

Another change that seems probable is the increase in people playing the same games on mobile phone networks. Many of these games are free at the moment, so companies don't earn much money from them. Some people are predicting that in future as multi-player games become more and more popular, players will have to pay for every episode.

Text Three

The Shawmari Reserve

The Shawmari Reserve opened in 1975. The main purpose of the reserve is to protect rare species of wildlife in the Middle East in danger from hunting and habitat destruction, and to increase their numbers. It is also an important educational centre for local people, children. The center includes a museum and breeding enclosures where the animals can be seen very close, like in a zoo. This is very popular for young people and is a wonderful place for school outings.

One of the most important projects is the Arabian Oryx breeding programme. The Oryx is a natural inhabitant of the Arabian Peninsula, but the last Oryx in the wild was killed in Oman in 1972. However, 10 years earlier, two wild life organizations had taken nine Oryx from different countries and established a World Survival Herd.

This herd grew, and in 1978 the Shawmari Reserve brought eleven Oryx to Jordan. Because of its breeding programme, there are now over 200 in the reserve. In 2002, some Oryx were taken to an enclosure in Wadi Rum. This is the first step towards reintroducing the Arabian Oryx into its natural home.

Other endangered animals at the Shawmari Reserve include ostriches, gazelles and onagers. There are also a lot of desert plants, including atriplex, a natural food source for the onager and Oryx. To see the animals, visitors can enter the Oryx enclosure on RSCN guided safari trips. The animals roam freely, so you have to look very carefully! The observation tower offers another exciting opportunity to watch birds and wild life.

RSCN: Royal society for the conservation of Nature

Appendix (II)
(General lesson plan for teaching the experimental group using
fishbone diagram technique)

Lesson Plan /experimental group

Class'/level: 10th grade

Unit Title: Building for the future

Number of Classes:

Lesson Title: text1/first

Building for the Future

Previous learning: some vocabulary and information about building

Specific outcomes	Materials/ sources	Procedures	Time
<p>By the end of the lesson Ss will be able to:-</p> <p>*(activity* 1)</p> <p>1- To allow the Ss who are familiar with fishbone diagrams to synthesize various factors into categories that make up a certain topic. The class then tries to guess what goes into the head of the fish.</p> <p>2- talk about the different kinds of buildings</p> <p>3-Identify the advantages of using the traditional and the modern ones in our lives</p> <p>4- Identify the disadvantages of using the traditional and the modern ones in our lives.</p>	<p>Fishbone Diagram Technique</p> <p>Worksheets</p>	<p>T. Explains the purpose of activity (1) is to synthesize the information in the body of a fishbone diagram to determine the topic or head of the fish.</p> <p>T. Divides students into small groups.</p> <p>T. Presents each group with a list of related factors that relate to a topic has been discussed in class. Provide the group with the name of the topic. The group should not allow other groups to see their topic title.</p>	10 M
		<p>T. Asks each group to determine categories for the factors related to their topic.</p> <p>T. Asks each group to create a Fishbone Diagram using the list of factors and the categories they created. The group should leave the head of the Fishbone Diagram blank.</p>	10M
		<p>T. Asks each group to present their Fishbone Diagram to the entire class(the head should still be left blank)</p> <p>T. Asks Ss to present the model of fishbone diagram.</p> <p>T. Summarize the results of the activity.</p>	5M

<p>5-To allow Ss who are not familiar with fishbone diagram to synthesize the information in the body of the fishbone diagram and determine the topic or head of the fishbone diagram</p>	<p>Handouts of several; completed Fishbone Diagrams (one for each group) Without the head Identified</p>	<p>(*Activity*2) Fishbone diagram clock:- T. Explains that the purpose of this activity is to synthesize the information the body of a Fishbone Diagram to determine the topic or head of the fish. T. Divides Ss into small groups. T. Provides each group with handouts of each of the Fishbone Diagrams created by the T. The Ss should not look at the diagrams until they are given permission to do. T. Tells the Ss that each handout contains a different Fishbone Diagram with all parts labeled expect for the head of the fish. Their goal is to determine the head of each diagram. T. Instructs the Ss to begin the activity. The group that completes all diagrams correctly in the least amount of time wins. T. Provides the winning group(s) with a reward (optional). T. Summarizes the results of the activity</p>	<p>10M</p>
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Lesson Plan /experimental group

Class'/level:10th grade

Unit Title: A special Zoo

Number of Classes:

Lesson Title: text1/first

A Shawmari Reserve

Previous learning : some vocabulary and information about animal in Jordan names and kinds of animals.

Specific outcomes	Materials/ sources	Procedures	Time
<p>By the end of the lesson Ss will be able to:-</p> <p>*(activity* 1)</p> <p>1- Allow the Ss who are familiar with fishbone diagrams to synthesize various factors into categories that make up a certain topic. The class then tries to guess what goes into the head of the fish.</p> <p>2- Talk about the wild life.</p> <p>3-Recognize different kinds of wild animals which exist in Jordan.</p> <p>4- Identify the importance of protecting wildlife.</p>	<p>Fishbone Diagram Technique</p> <p>Worksheets</p>	<p>T. explains the purpose of activity (1) is to synthesize the information in the body of a fishbone diagram to determine the topic or head of the fish.</p> <p>T. divides students into small groups.</p> <p>T. Presents each group with a list of related factors that relate to a topic has been discussed in class. Provide the group with the name of the topic. The group should not allow other groups to see their topic title.</p>	10 M
		<p>T. Asks each group to determine categories for the factors related to their topic.</p> <p>T. Asks each group to create a Fishbone Diagram using the list of factors and the categories they created. The group should leave the head of the Fishbone Diagram blank.</p>	10M
		<p>T. Asks each group to present their Fishbone Diagram to the entire class(the head should still be left blank)</p> <p>T. asks Ss to present the model of fishbone diagram.</p> <p>T. Summarize the results of the activity.</p>	5M

<p>5-To allow Ss who are not familiar with fishbone diagram to synthesize the information in the body of the fishbone diagram and determine the topic or head of the fishbone diagram</p>	<p>Handouts of several; completed Fishbone Diagrams (one for each group) Without the head Identified</p>	<p>(*Activity*2) Fishbone diagram clock:- T. Explains that the purpose of this activity is to synthesize the information the body of a Fishbone Diagram to determine the topic or head of the fish. T. Divides Ss into small groups. T. Provides each group with handouts of each of the Fishbone Diagrams created by the T. The Ss should not look at the diagrams until they are given permission to do. T. Tells the Ss that each handout contains a different Fishbone Diagram with all parts labeled expect for the head of the fish. Their goal is to determine the head of each diagram. T. Instructs the Ss to begin the activity. The group that completes all diagrams correctly in the least amount of time wins. T. Provides the winning group(s) with a reward (optional). T. Summarizes the results of the activity</p>	<p>10M</p>
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Lesson Plan /experimental group

Class'/level: 10th grade

Unit Title: Computer games

Number of Classes:

Lesson Title: text1/first

Fast Forward to the Future

Previous learning: some vocabulary and information about computer games

Specific outcomes	Materials/ sources	Procedures	Time
<p>By the end of the lesson Ss will be able to:-</p> <p>*(activity* 1)</p> <p>1- Allow the Ss who are familiar with fishbone diagrams to synthesize various factors into categories that make up a certain topic. The class then tries to guess what goes into the head of the fish.</p> <p>2- talk about the different kinds of computer games</p> <p>3-Identify the advantages and the disadvantages of using the traditional and the modern ones in our lives.</p> <p>4- Explain the new games which will be used in the future.</p>	<p>Fishbone Diagram Technique</p> <p>Worksheets</p>	<p>T. Explains the purpose of activity (1) is to synthesize the information in the body of a fishbone diagram to determine the topic or head of the fish.</p> <p>T. Divides students into small groups.</p> <p>T. Presents each group with a list of related factors that relate to a topic has been discussed in class. Provide the group with the name of the topic. The group should not allow other groups to see their topic title.</p>	10 M
		<p>T. Asks each group to determine categories for the factors related to their topic.</p> <p>T. Asks each group to create a Fishbone Diagram using the list of factors and the categories they created. The group should leave the head of the Fishbone Diagram blank.</p>	10M
		<p>T. Asks each group to present their Fishbone Diagram to the entire class(the head should still be left blank)</p> <p>T. Asks Ss to present the</p>	5M

<p>5-To allow Ss who are not familiar with fishbone diagram to synthesize the information in the body of the fishbone diagram and determine the topic or head of the fishbone diagram</p>	<p>Handouts of several; completed Fishbone Diagrams (one for each group) Without the head Identified</p>	<p>model of fishbone diagram. T. Summarize the results of the activity.</p> <p>(*Activity*2) Fishbone diagram clock:- T. Explains that the purpose of this activity is to synthesize the information the body of a Fishbone Diagram to determine the topic or head of the fish. T. Divides Ss into small groups. T. Provides each group with handouts of each of the Fishbone Diagrams created by the T. The Ss should not look at the diagrams until they are given permission to do. T. Tells the Ss that each handout contains a different Fishbone Diagram with all parts labeled expect for the head of the fish. Their goal is to determine the head of each diagram. T. Instructs the Ss to begin the activity. The group that completes all diagrams correctly in the least amount of time wins. T. Provides the winning group(s) with a reward (optional). T. Summarizes the results of the activity.</p>	<p>10M</p>
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Appendix (III)
(General lesson plan for teaching the control group using conventional method)

Lesson Plan /control group

Class'/level: 10th grade

Number of Classes:

Unit Title: Computer games

Lesson Title: text1/first

Fast Forward to the Future

Previous learning: some vocabulary and information about computer games

Specific outcomes	Materials/ sources	Procedures	Time
1-To talk about computer games.	Student's book pages 38-39 Workbook Pages 22-23 Teacher's book	1-T uses pictures and magazine advertisement for computer games and asks Ss about them.	10 minutes
2-To use new words in meaningful sentences.		2-T writes the new words on the board and gives their meanings then asks the Ss to use them in meaningful sentences.	5 minutes
3-To ask and answer about computer games.		3- T asks Ss to write about the advantages and the disadvantages of playing computer games.	10 minutes
4-To be able to write a composition about computer games.		4- T asks Ss to work individually.	20 minutes
		5- T checks Ss works and writings	

Lesson Plan /control group

Class'/level: 10th grade

Number of Classes:

Unit Title: A special Zoo

Lesson Title: text1/first

A shawmari Reserve

Previous learning: some vocabulary and information about wildlife /wild animal

Specific outcomes	Materials/ sources	Procedures	Time
1-To talk about Shawmari Reserve in Jordan	Pictures of animals and reserves	1-T uses pictures and magazine advertisement for wild animals and asks Ss about them.	10 minutes
2-To talk about the importance of the animals.	Student's book pages 50-51	2-T writes the new words on the board and gives their meanings then asks the Ss to use them in meaningful sentences.	5 minutes
3-To ask and answer about wild animals.	Work book Pages 32-33	3- T asks Ss to write about Keeping wild animals from extinction/ how to protect wildlife.	10 minutes
4-To be able to write a composition about wildlife.		4- T asks Ss to work individually	20 minutes
		5- T checks Ss works and writings.	

Lesson Plan /control group

Class'/level: 10th grade

Unit Title: Building for the future

Number of Classes:

Lesson Title: text1/first

Building for the Future

Previous learning: some vocabulary and information about buildings

Specific outcomes	Materials/ sources	Procedures	Time
1-To talk about different kinds of buildings.	Pictures of traditional and modern building	1-T uses pictures and magazine advertisement for building and asks Ss about them.	10 minutes
2-To ask and answer about kinds of buildings.		2-T writes the new words on the board and gives their meanings then asks the Ss to use them in meaningful sentences.	5 minutes
3-To use new words in meaningful sentences.	Student's book pages	3- T asks Ss to write about Why do people prefer to live in modern buildings more than in traditional ones?	10 minutes
4-To be able to write a composition about buildings.		4- T asks Ss to work individually.	20 minutes
	Work book Pages	5- T checks Ss works and writing.	

Appendix (IV)
(The Writing Skill Test (Pre-Post test))

The Writing Skill Test (Pre-Post-Test)

English Exam

Tenth grade
Name:

Subject : English language

Time:2 Hours
Total Mark: 70 points

Read the following texts carefully, and then answer the questions that follow

Buildings

Burj al-Arab

It's definitely worth going, especially to see the hotel. It's the only seven-star hotel in the world. It's on a man made Island in the Gulf and it's 355 meters high- that's higher than the Eiffel Tower in Paris. It cost a million pounds to build and rooms are £2000 a night- probably because they have four staff for every guest. If you go there to eat, you can ride in one of the world's fastest lifts to one of the world's highest restaurants. I had a look round and went somewhere else to eat.

The Sydney Opera House

I went there last year. It's absolutely impossible to imagine the harbour when I first saw it, I thought it looked like a ship. From the outside it looks huge- but inside it seems much smaller. And it's a bit old fashioned-that's because it's over thirty years old, I suppose. Going to a performance there is really expensive, and it's very difficult to get tickets, but you can walk round parts of it for free.

Jordan Gates

I went with my mother. We took a taxi up there highest hill in Amman, and could see the whole city from the top of it! The whole site is massive: 220,000 square meters. It is currently being built, and when the two towers are finished they will be the tallest in Jordan.

Fast forward to the future of games

Technology experts are predicting that computer games of the future will be a lot more difficult both for games producers and for players. In particular, they say, games will look much more realistic, and computer-controlled characters will be more believable. This means that keen computer games players will almost certainly spend more time playing games than they do at the moment. New technology will enable companies to create more complex games. The graphics of computer games will definitely improve, but this may cause problems. Firstly, game studios will have employed hundreds of animators to produce enough creatures to fill huge computer worlds. Secondly, designers may spend too much time on visual effects and forget about the quality of the games themselves.

One computer expert said' when you move away from games where characters just fight each other, speaking will become much more

important. We will have to make our games characters more intelligent: in the end they will even have conversations with each other'.

Another change that seems probable is the increase in people playing the same on the mobile phone networks. Many of these games are free at the moment, so companies don't earn much money from them. Some people are predicting that in future as multi-player games become more and more popular, players will have to pay for every episode.

The Shawmari Reserve

The Shawmari Reserve opened in 1975. The main purpose of the reserve is to protect rare species of wildlife in the Middle East in danger from hunting and habitat destruction, and for tourism. The center includes a museum and breeding enclosures where the animals can be seen very close, like in a zoo. This is very popular with young people and is a wonderful place for school outings.

One of the most important projects is the Arabian Oryx breeding programme. The Oryx is a natural inhabitant of the Arabian Peninsula, but the last Oryx in the wild was killed in Oman in 1972. However, 10 years earlier, two wildlife organizations had taken nine oryx from different countries and established a World Survival Herd.

This herd grew, and in 1978 the Shawmari Reserve brought eleven oryx to Jordan. Because of its breeding programme, there are now over 200 in the reserve. In 2002, some oryx were taken to an enclosure in Wadi Rum. This is the first step towards reintroducing the Arabian Oryx into its natural home.

Other endangered animals at the Shawmari Reserve include ostriches, gazelles and onagers. There are also a lot of desert plants, including atriplex, a natural food source for the onager and oryx. To see the animals, visitors can enter the oryx enclosure on RSCN guided safari trips. The animals roam freely, so you have to look very carefully! The observation tower offers another exciting opportunity to watch birds and wild life.

RSCN : Royal society for the conservation of Nature

Question Number One: (16 points)

Answer the following questions:

1. What made it difficult computer games in the future?
.....
2. What effects do modern computer games have on the players?
.....
3. Why is it important to create intelligent games characters in the modern computer games?.....
4. Explain why Burj al Arab is different from all other hotels?.....

5. Why do you think people visit all the buildings which are mention above?
6. Why are Jordan Gates considered as a massive building in Jordan?
7. What is the main reason behind establishing the Shawmari Reserve?
8. Why is it important to protect wildlife?.....

Question Number Two: (8 points)

Give possible explanations to answer the following questions.

1. Why were some oryx taken to Wadi Rum in 2002?
2. Why is it so difficult to buy a ticket to enter Sydney Opera House?
3. Why do you think the developments of computer games graphics can cause many problems?.....
4. Why is it worth visiting Burj alArab?

Question Number Three : (12 points)

Read the following statements if the statement is a cause circle (C) and if the statements is an effect circle (E)

1. C . E There will not be any free games in the future.
2. C E In Burj al Arab hotel they have four staff for every guest.
3. C E providing a natural home for the endangered animals leads to having many natural reserves.
4. C E Therefore, it's a man- made island .it's considered as the only seven stars in the world.
5. C E Killing more animals lead to reduce their numbers.
6. C E New technology will change the way we play computer games.

Question Number Four (8 points)

Circle the correct answer?

1. Technology experts are predicting that computer games in the future will be a lot (easier / sillier / more difficult)
2. The reason behind eating in Burj al Arab is that?:
(it has got the most highest restaurants in the world)
(it has got the most delicious food in the world)
(It has got the slowest lift in the world)
- 3.The great number of the endangered animals lead to:.....

- (Constructing more natural reserves / killing more of animals)
4. Too much care of visual effects lead to :
 (Spending more time with focusing on the quality)
 (Spending more time with forgotten about quality)
 (Spending little time with focusing on the quality)
5. Why did the speaker think that Sydney Opera House looks like a ship. It is (so small/ so huge / so beautiful)

Question Number Five (8 points)

Write your effect for each cause. Write your imagination and write a complete sentence.

1. Cause: The sun is shining.
Effect: _____
2. Cause : Sammer heard a bell ringing.
Effect : _____
3. Cause : I planted some seeds.
Effect : _____
4. Cause : _____
Effect : _____

Question Number Six: (8 points)

Match the cause with the effect:

<u>Cause</u>	<u>Effect</u>
1. ,there are four Staff for every guest.	a. more time will be spent by the players
2. , Shawmari Reserve Stands as an important educational Center.	b. 200 oryx are now in Shawmari Reserve
3. ,Jordan has Started breeding programme.	c. You have to pay £2000 a night
4. ,computer games will be more realistic and more believable	d. Learning more about animals

Question Number Seven: (8 points)

Write a composition of a bout 60 words on ONE of the following:

- 1- The effect of playing too much computers games on your personal life .
- 2- Why do people prefer to live in modern buildings more than traditional one.
- 3- Why do we have to protect wildlife.

Appendix (V)
(Key answer of the Writing Skill Test)

Key answers to the Writing Skill Test

Question Number One

1. Games will look much realistic, and computer-controlled characters will be more believable.
- 2-Computer games players will almost certainly spend more time playing games than they do at the moment.
- 3-Because at that time animal characters will have conversation between them so we need to create intelligent games characters in the modern computer games.
- 4-It is the only seven –star hotel in the world. It is on a man-made Island in the Gulf and it's 355 meters high .
- 5-Because they are beautiful, significant, and worth to spend time on them.
- 6-Because it is 220.000 square meters.
- 7- The main cause of establishing the Shawmari reserve is to protect rare spices of wildlife in the Middle East in danger from hunting and habit destruction, and to tourist.
- 8-Beause it is important to keep the rare spices from extinction and they are useful in increasing the animals numbers.

Question Number Two

- 1.Because it is the first step towards reintroducing the Arabian oryx into its natural home.
- 2.Because going to a performance there is really expensive due to its great historical value.
- 3.Because new technology will enable companies to create more complex games. The graphics of computer games will definitely improve, but this may cause problems. Firstly, game studios will have employ hundreds of animators to produce enough creatures to fill huge computer worlds. Secondly, designers may spend too much time on visual effects and forget about the quality of the games themselves.
4. It's the only seven-star hotel in the world. It's on a man made Island in the Gulf and it's 355 meters high- that's higher than the Eiffel Tower in Paris. It coast a million pounds to build. If you go there to eat, you can ride in one of the world's fastest lifts to one of the world's highest restaurants.

Question Number Three

- 1.E
- 2.E
- 3.C
- 4.C
- 5.C.
- 6.C

Question Number Four

1. more difficult
2. It has got the most highest restaurant in the world
3. constructing more natural reserves
4. spending more time with forgotten about the quality
5. so huge

Question Number Five

Each student has her own answer

Question Number Six

1. c
2. d
3. b
4. a

Question Number Seven

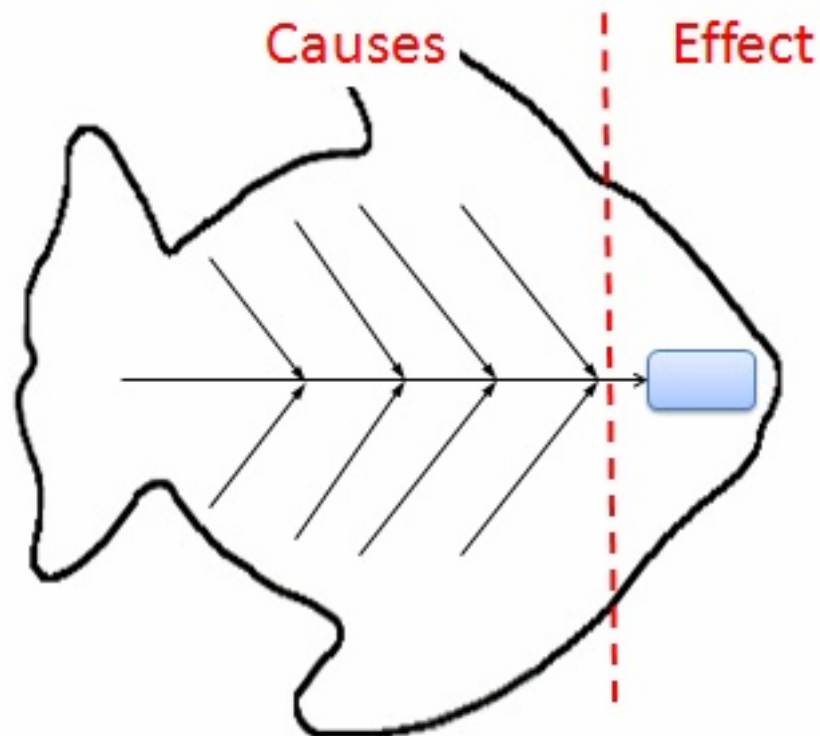
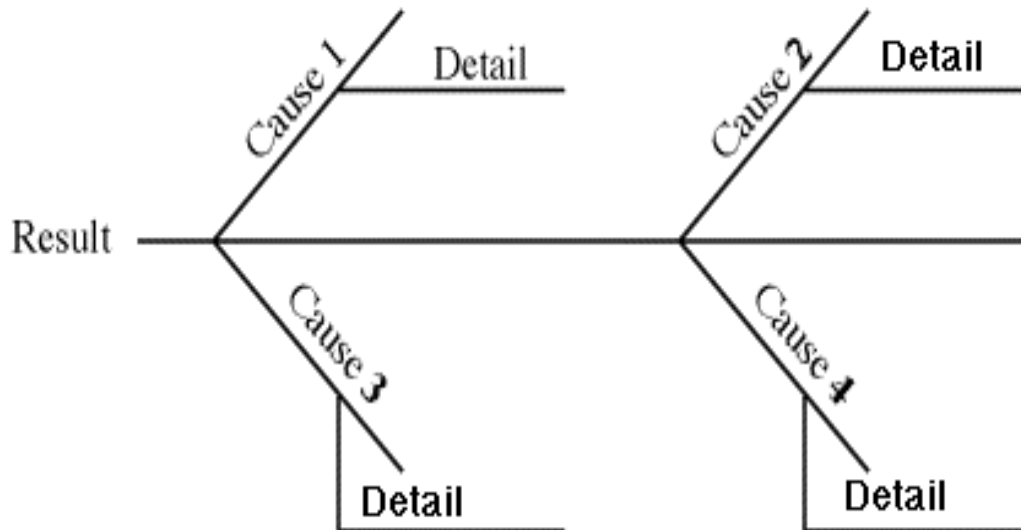
Each student has her own answer

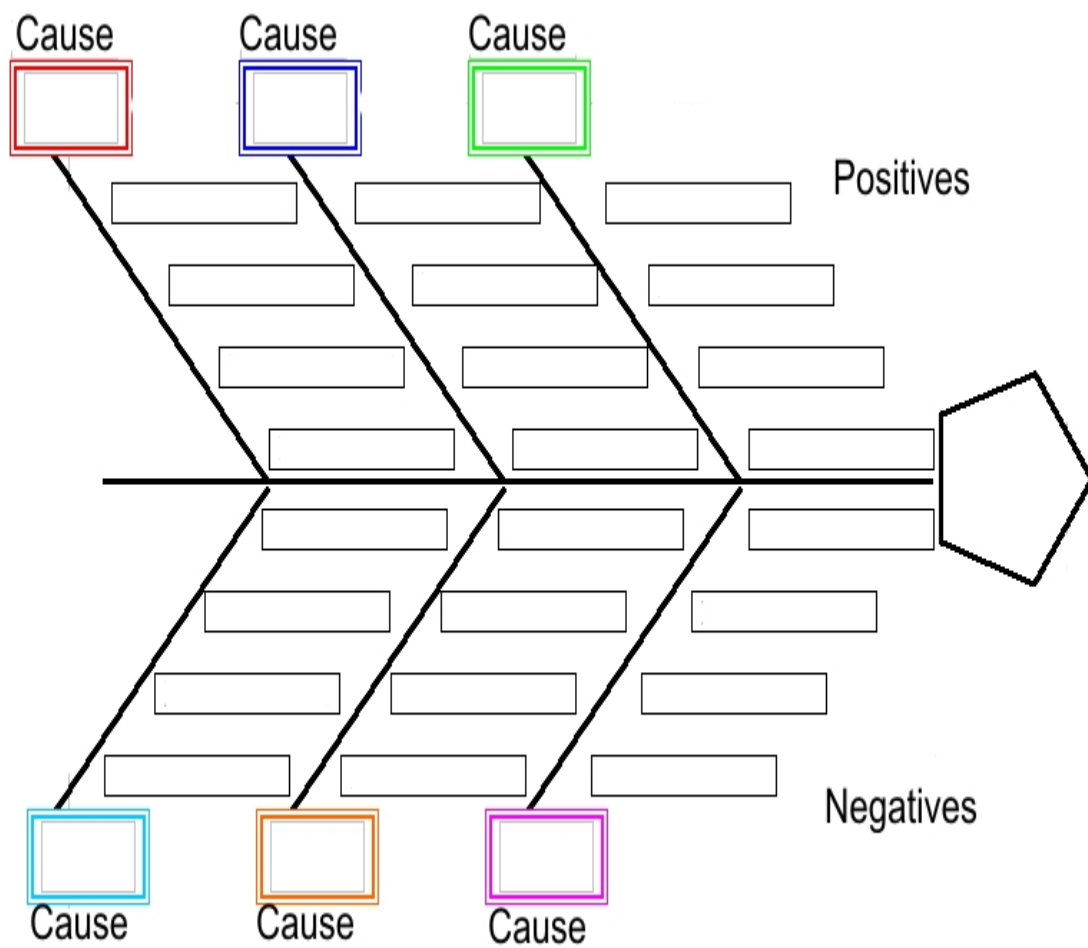
Appendix (VI)
Sample of fishbone diagrams

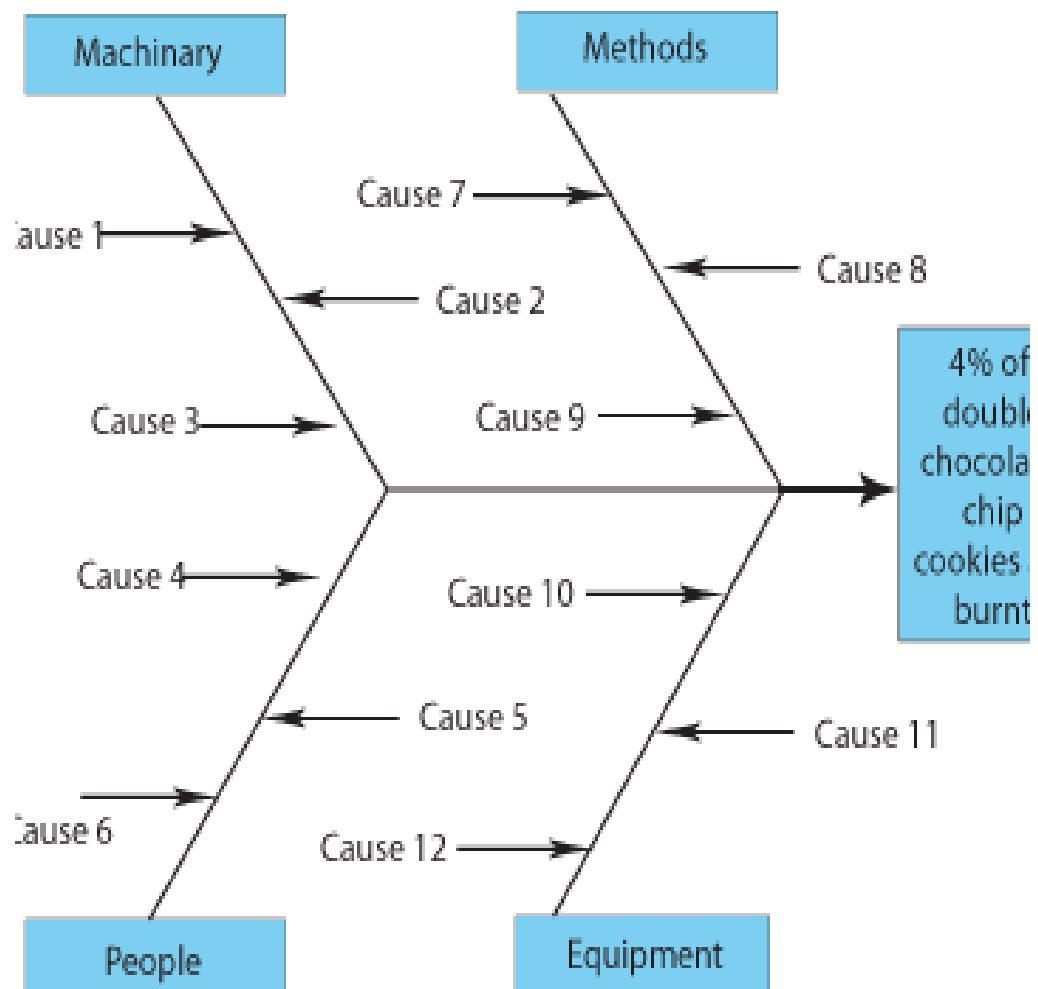
Fishbone Mapping

A Fishbone Map is used to show the causal interaction of a complex event (an election, a nuclear explosion) or complex phenomenon (juvenile delinquency, learning disabilities).

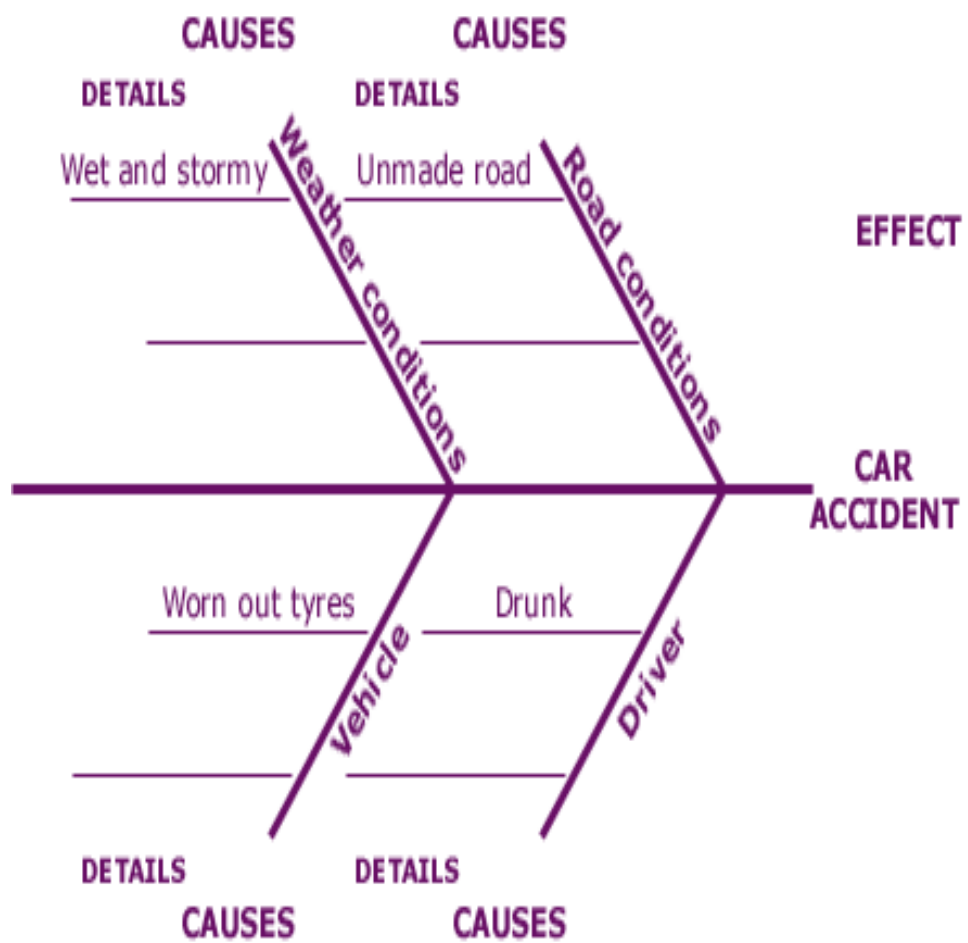
Key frame questions: What are the factors that cause X ? How do they interrelate? Are the factors that cause X the same as those that cause X to persist?

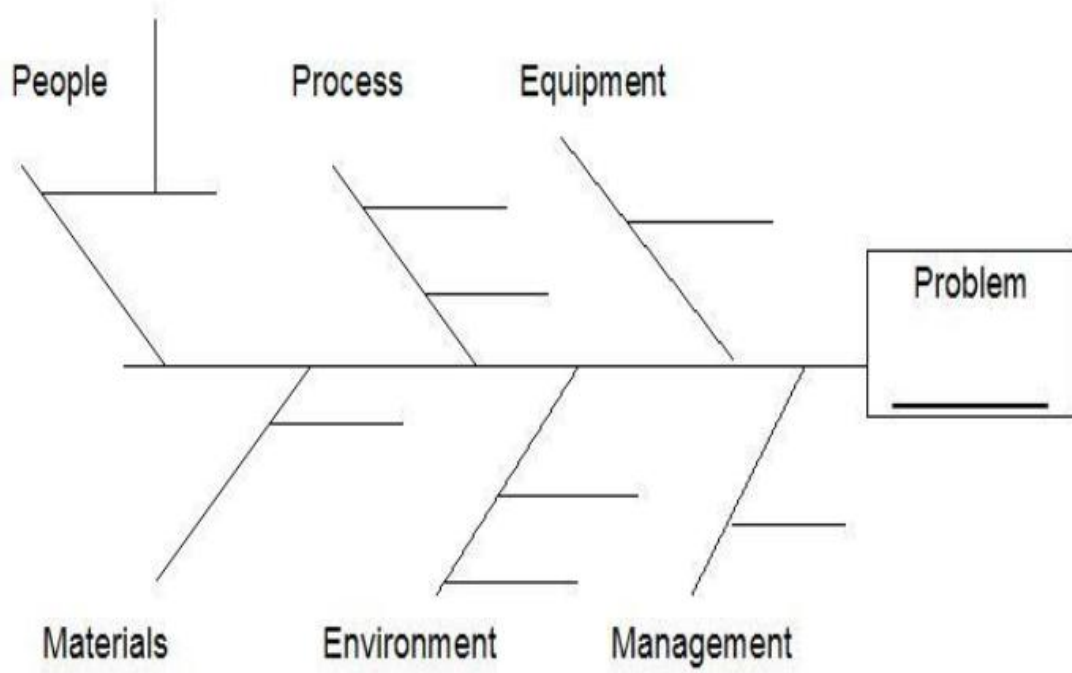


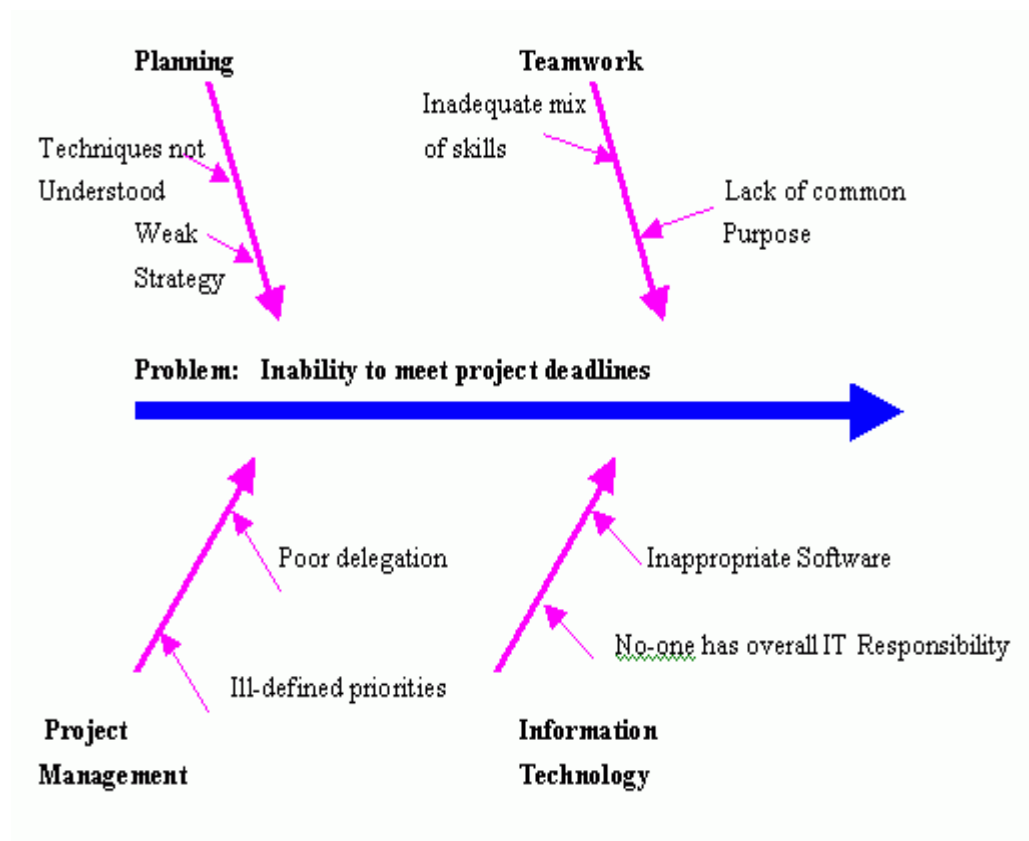


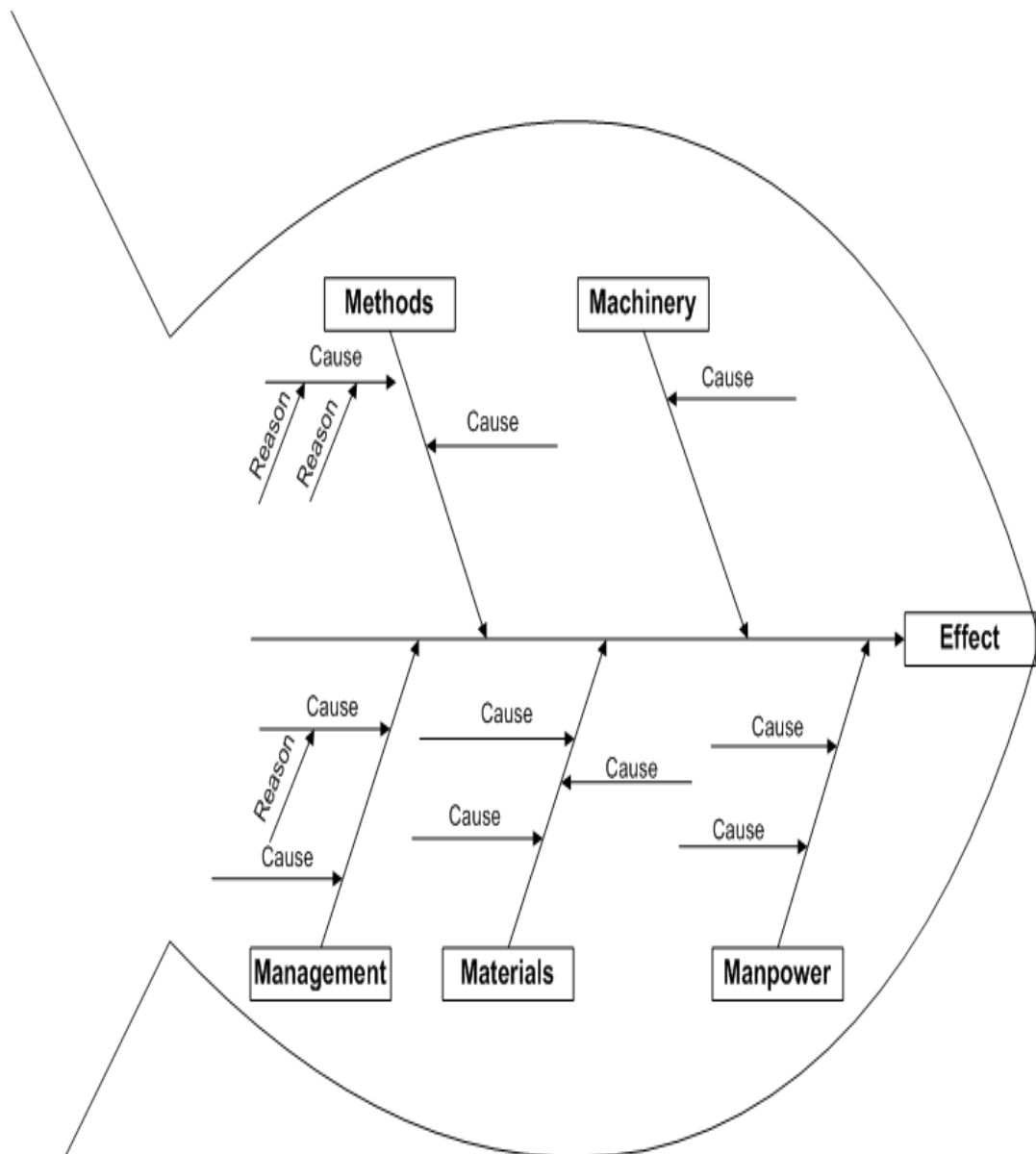


Top Tip - The Writing's On the Wall

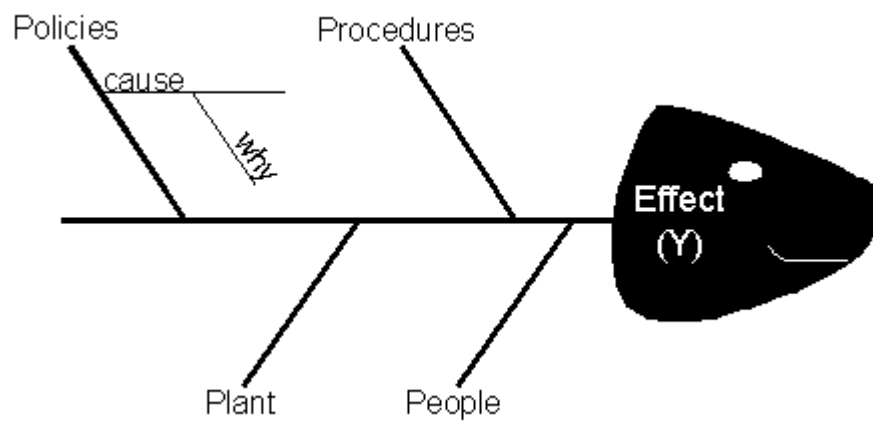
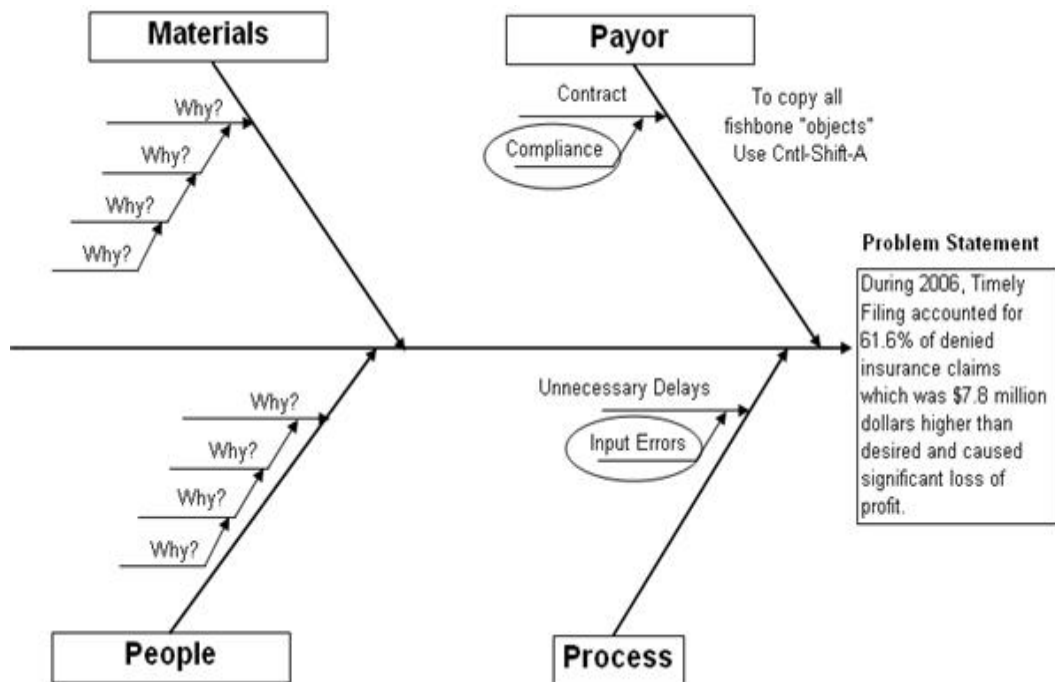








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Appendix (VII)
Samples of Students' Writing

عبدالرحمن بن عبدالمطلب

Modrning building.

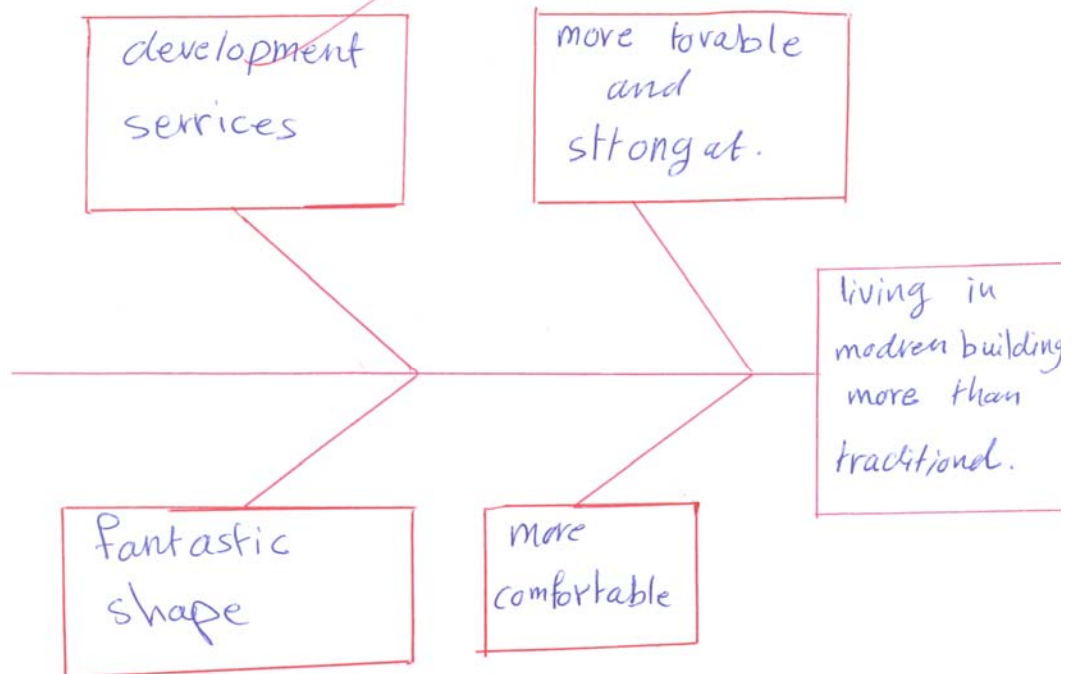
Living in modren biulding more than traditional because of many reasons.

Firstly: It is ~~more torbale and~~ stronger ^{than the traditic ones.} it can stand for Long time and to relate the storm. ~~bad condition.~~

Secondly: all most of them have Fantastic Shape and odd.

also they have development services such as almost of them have Lifes and Security Sy stems.

Finally: they are more comfortable in their designs such as they could handle a large numer of people.



الاسم :- خلود عجم الطوي

Modern building.

Living in modern buildings are different in living in traditional ones because:-

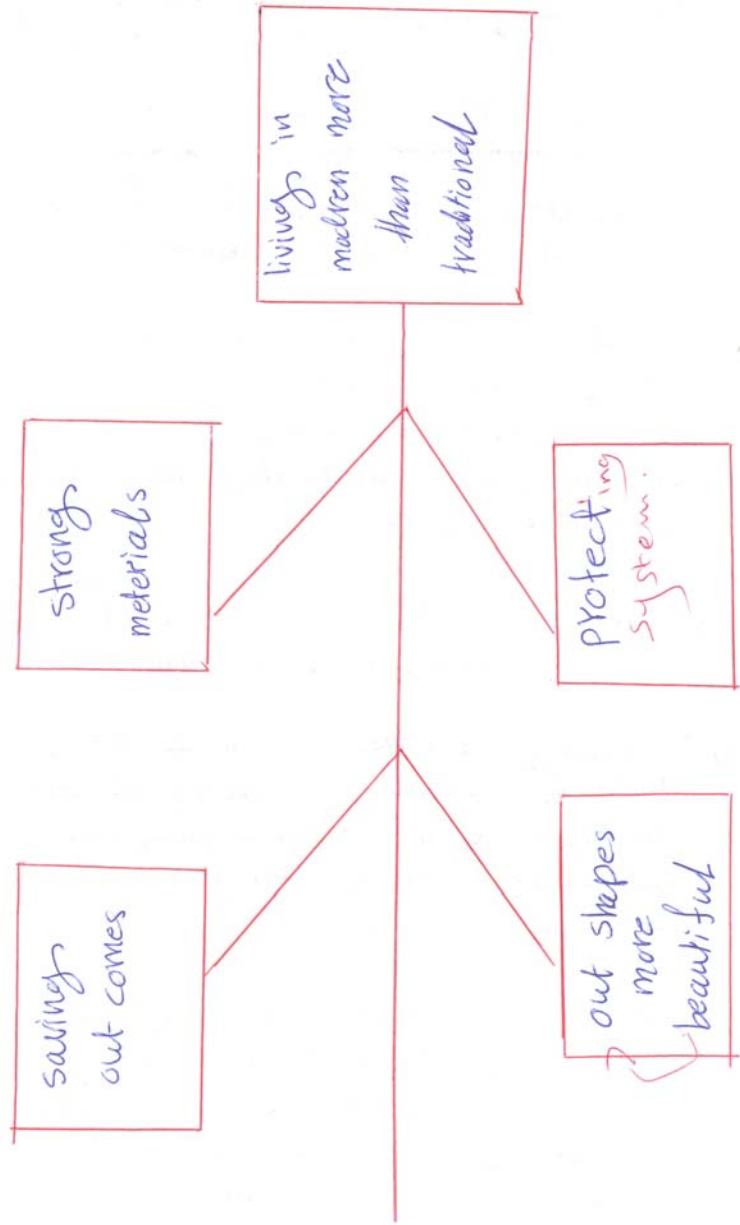
Firstly :- out shapes :- the modern building have strange ^{designs} designs but it's very beautiful and deeping. It may include one floor or many floor, and they have different beautiful colours.

Secondly :- strong materials ^{are used.} ~~were be used.~~ ^{just} it became to resist earthquakes and hurricanes.

Thirdly :- saving out comes :- such as the modern building has many technological services. ~~the house owner can know the person out of the house by using some instrument which could do this services.~~ ^{such as the cameras.} ~~they are very helpful.~~

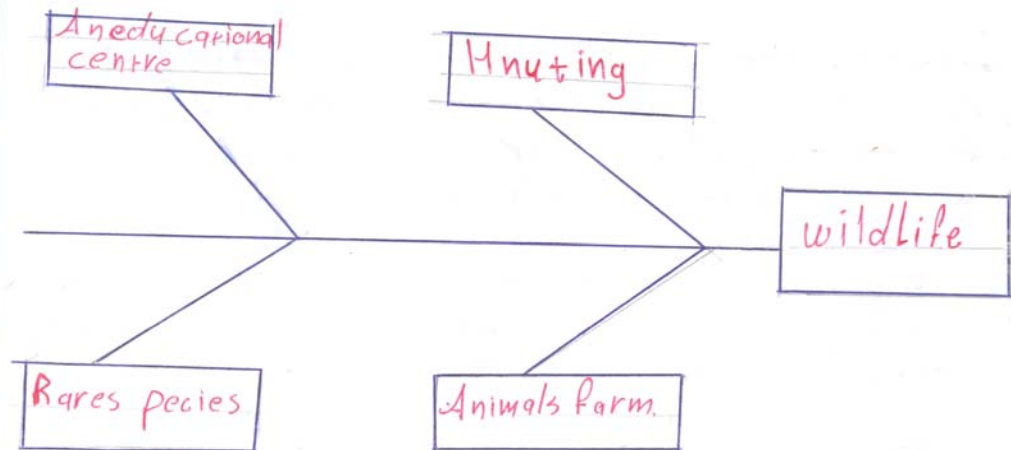
Finally :- protecting The modern buildings ^{have} ~~protecting~~ services during from there saving systems almost of the modern buildings have got saving systems such security guard cameras, warming system.

خالد عجم



الاسماء - مروة مطيع علي العجاليا

wild life



The wildlife is very important for the environment so we have to save the animals and safe homes for animals from danger.

Hunting.

There are some ^{reserves} reserves such as shaw mari Reserve which is their main purpose is to protect rare species of wildlife from hunting and habitat destruction and to increase their numbers.

Animals farm.

Animal farm is very important to save the animal from the dangerous situations. The farmers should keep the animals in reserve so it save the animals from

is away of saving
(11)

hunting and supply them of food. The main reserve in Jordan is shaw mari Reserve it is found to protect rare species of wildlife in the Middle East.

Educational Centre.

We also could protect wildlife by constructing ^{many} educational centres. They could help the local people to realize the ^{importance} of wildlife.

Rare species.

The main reason of protecting wildlife is to protect the rare species of wild animals such as ostrich, Oryx ... as we have in Jordan so we should do many things to protect them such as to have breeding programme & having Reserve ...



Wild animals

حيوانات برية مهمة

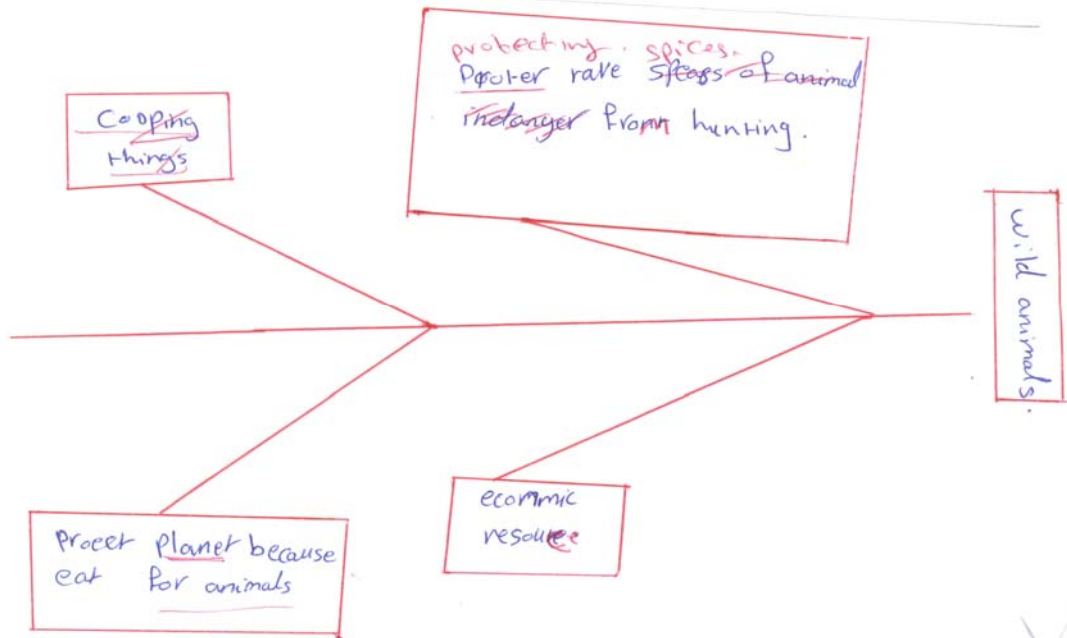
Wild animals are important for people, so we should protect them.

First, we should add more reserves and provide animals with plants to feed them perfectly.

I think having wild life organization help us to protect animals and plants, develop economic ~~or~~ more and also it gives beautiful view to attract to tourists.

Second, banish hunter who hunts rare animals by putting them in prison or by given high taxes or fines.

Finally, wild animals rise economic income by encouraging tourism.



الاسم: محمّد
بني عتيق

wild life

The reasons behind protecting wildlife are like this. ^{Firstly} Because we could benefit from the animals slain, meat, eggs ----- etc.

Secondly, Protecting wild life could increase the ^{income} national ^{out comes} animals may develop ^{the} economy of our country.

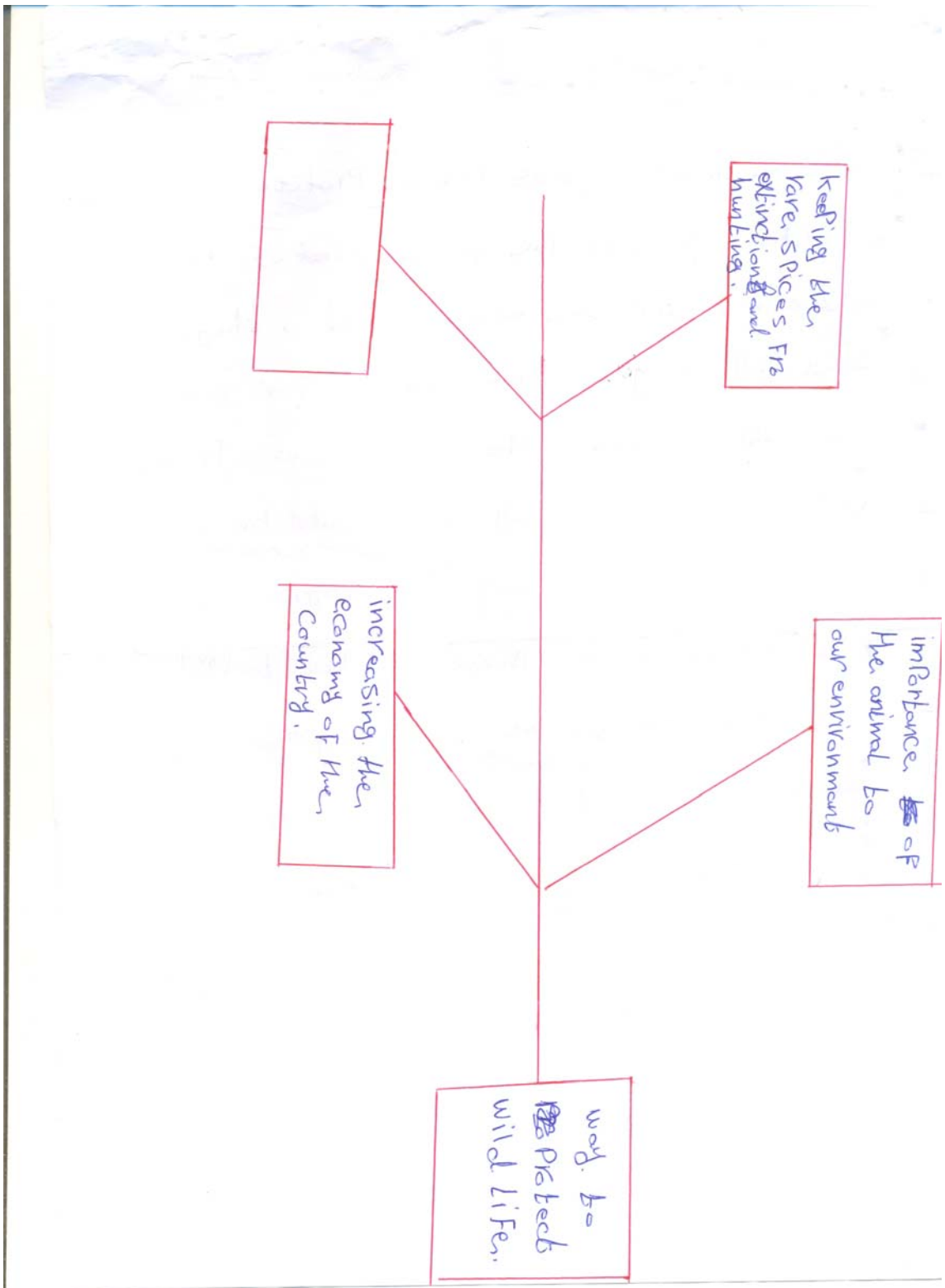
Thirdly, The beautiful scenes and views of these wild animals are very great thing to pay and worth to see. ~~The~~

Finally, The ^{importance} ~~importance~~ of wild animals to our environment. They are very useful for us as human beings and for the planets. ^{on the other side}

شباب سلك الخطوي

There are many reasons behind protecting wild life. Firstly, The importance of the wild animals for the environment, they could help in giving good shape for our nature. Secondly, keeping the rare species from extinction and hunting, this could be achieved by having reserves, zoos and programmes for breeding them. Thirdly, we have to protect wild life, because we could increase ^{of our country} ~~our~~ ^{the} economy by increasing their numbers and also by ~~increasing~~ ^{increasing} the number of ~~the~~ tourists.

good



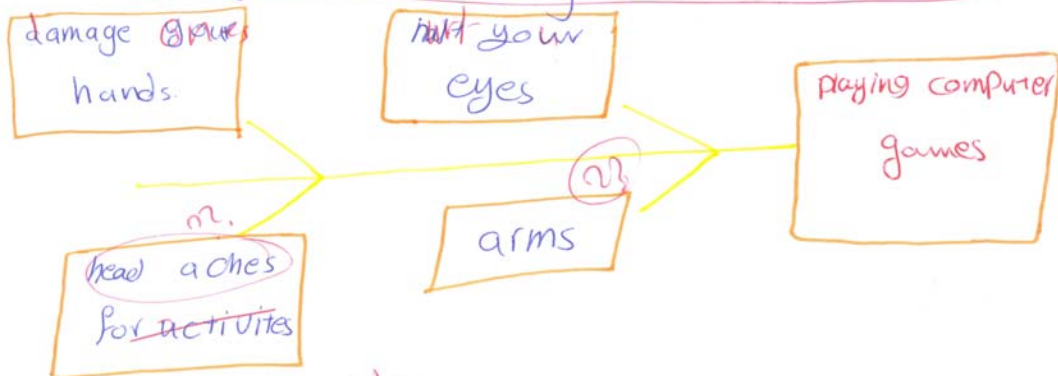
Problems computer games

بعض المشاكل
على الحاسوب

* In my opinion. The main ~~dis~~ ^{disadvantages} ~~advantages~~ ^{of this} is The

at people may spend so much time on their
computers that the ^{isolated them} ~~see loss~~ of their friends
and family. children who spend too long ^{time} playing
computer games may become unsocial ~~bleed~~

~~For~~ get now to normally with other people.



* 1 the people ^{who} spending too much time at their
computers is ~~that~~ ^{may hurt their bodies} their health suffers.

~~sitting for~~ ^{such as} long periods of time can hurt ^{they} ~~your~~ eyes.

~~causes~~ headaches or damage ^{their} ~~your~~ hands, ~~sometimes~~

In some cases this means that people
cannot do their jobs properly.

CV

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